### H.R. 5820, THE TOXIC CHEMICALS SAFETY ACT OF 2010

### **HEARING**

BEFORE THE

SUBCOMMITTEE ON COMMERCE, TRADE, AND CONSUMER PROTECTION  $_{\rm of\ THE}$ 

# COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES

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### H.R. 5820, THE TOXIC CHEMICALS SAFETY **ACT OF 2010**

#### THURSDAY, JULY 29, 2010

House of Representatives, SUBCOMMITTEE ON COMMERCE, TRADE, AND CONSUMER PROTECTION, COMMITTEE ON ENERGY AND COMMERCE, Washington, DC.

The Subcommittee met, pursuant to call, at 10:08 a.m., in Room 2123 of the Rayburn House Office Building, Hon. Bobby Rush [Chairman of the Subcommittee] presiding.

Members present: Representatives Rush, Schakowsky, Sarbanes, Sutton, Pallone, Green, Gonzalez, Barrow, Castor, Space, DeGette, Dingell, Waxman (ex officio), Murphy of Connecticut, Whitfield, Pitts, Murphy of Pennsylvania, Gingrey, Scalise, Latta, and Barton

Staff present: Bruce Wolpe, Senior Adviser; Michelle Ash, Chief Counsel; Tim Robinson, Counsel; Robin Appleberry, Counsel; Tracy Sheppard, Counsel; Jacqueline Cohen, Counsel; Melissa Bez Cheatham, Professional Staff; Rebecca Brown, Fellow; Peter Ketcham-Colwill, Special Assistant; William Wallace, Special As-sistant; Elizabeth Letter, Press Assistant; Billie McGrane, Press Intern; Monica La, Energy and Environment Intern; Jerry Couri, Senior Professional Staff; Brian McCullough, Senior Professional Staff; Shannon Weinberg, Counsel; and Sam Costello, Legislative Analyst.

#### OPENING STATEMENT OF HON. BOBBY L. RUSH, A REP-RESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. Rush. The Subcommittee on Commerce, Trade and Consumer Protection will now come to order. The Chair wants to recognize all who are gathered here. The Chair would like to extend his welcome to the witnesses who are here, and the Chair recognizes himself for 5 minutes for the purposes of an opening statement.

Today we are pleased to welcome all of our seven witnesses who represent a wide range of views on the state of chemical regulation in the U.S. I know that each and every one of you are very concerned about the proper role of the EPA in assessing chemical risk, hazards, exposure, and safety as they relate to subject of human health, public safety, and the environment. And I look forward to listening to the testimony of the witnesses and their reactions to H.R. 5820, The Toxic Chemicals and Safety Act of 2010, which I proudly co-authored and introduced in the House of Representatives along with our Full Committee Chairman, Chairman Waxman, one week ago last Thursday.

Because we anticipated that we would introduce a major chemical reform bill before the August recess, Mr. Waxman and I invited critical stakeholders beginning in early May 2010 to comment and participate in, in person I might add, at a number of stakeholder sessions on a draft discussion that serves as a precursor to the bill that is the subject of today's hearing.

My own role in all of this was to put forth a bill that all sides would not necessarily fall in love with, but a bill that they can actually live with. Just like the hundreds of millions of Americans must live with chemical substances, mixtures, and articles that they put on their bodies and found in containers where they store their food and water, and then they put onto their breakfast, lunch, and/or dinner tables of their families, their loved ones before putting it into their precious, precious bodies.

One thing that is absolutely clear to me is that Americans want, need, and demand to know much more than they have ever known in the past. They want to know what chemicals are in their consumer products, what chemicals are in their food and drink, what chemicals are in their homes, their surrounding communities, and throughout their environment. Americans are also demanding to know what are the associating use, hazard and exposure risk and harms. Are they from these chemicals to their own health, and to

the health of their families and to the environment?

This hearing and this bill will open this important discussions about these important issues and regulatory dysfunction beyond just the players inside the Washington Beltway by meaningfully shifting the burdens to industry all along this consumer and industrial goods supply chains to provide much to this missing scientific and health and information to the EPA. The American people who have far too long been left out of the loop on these matters will be far better off tomorrow than they are today.

With that I again want to thank the witness and I yield back the balance of my time, and I recognize now the Ranking Member, Mr.

Whitfield for 5 minutes.

Mr. WHITFIELD. Thank you, Mr. Chairman. Thank you Mr. Chairman and is my microphone on?

Mr. Rush. Is his microphone on?

#### OPENING STATEMENT OF HON. ED WHITFIELD. A REPRESENT-ATIVE IN CONGRESS FROM THE COMMONWEALTH OF KEN-**TUCKY**

Mr. WHITFIELD. OK, thank you. Not that you all would miss anything by not hearing what I would say, but first of all I want to welcome all the witnesses. We look forward to your testimony on a very important subject. It is my understanding in 90 percent; six percent of all manufactured goods in America are involved in some way with chemicals. And yesterday on the House Floor we passed a bill setting up a National Strategy Board to encourage more manufacturing jobs in America. And Majority Leader Hoyer and Speaker Pelosi have adopted just recently a theme, Make It in America, and all of us certainly support that.

But when you look at this legislation, not trying to be an obstructionist, not trying to just create problems to be creating problems, but when you analyze this bill we have serious concerns with this bill. And many of us genuinely believe that if this legislation is passed as written and as amended then instead of helping us create more jobs in America, it will help us lose more jobs in America. I am not going to go over all my concerns. I am just going to list a few.

Under this legislation a company trying to make a new product will need to run an assessment not only of the product as they intend to use it, but for also any other area in Commerce where a consumer may come in contact with that product. This could be especially problematic for automobile makers and many other manufacturers. The approval process through the EPA is impossible. Hundreds of toxicologist and risk assessors will need to be hired even with the extra staffing it will be long, cumbersome and time consuming if Reach is an example, their offices have been overwhelmed with paper just on the study portions. The so called Safe Standard is so complex and involved with its conditions and caveats I am not sure what chemical would be able to meet it. The bill compromises confidential business information by requiring that businesses file all the data on their product and make some of the information through public databases. And finally this bill creates a user fee to fund the entire operation of the bill, yet the user fee is not directed to go to the agency or its chemicals program.

I would also just like to read from the testimony some experts on this subject. H.R. 5820 as currently drafted promotes unworkable approaches to chemicals management. As a—on the Safety Standard this comment was made. The Safety Standard established in this bill sets such an impossible high hurdle for all chemicals in Commerce that would provide—that it would produce technical, bureaucratic, and commercial barriers so significant that that law would be ineffective and unworkable. On the new chemicals portion, H.R. 5820 is so overly broad that there would be adverse effects in the amount of upfront data required before a new chemical could be put on the market; was so complex that the result will be that this innovation moves to other countries to produce chemicals with more manageable regulatory regimes and the production of these new chemistries would move there as well. We would be exporting innovation and jobs instead of products.

H.R. 5820 puts the burden of compliance on the retailer and other importers in a manner that is unworkable, unenforceable, and not compliant with International Trade Laws. H.R. 5820 does include some improvements over the discussion draft, but its foundation is still unworkable. So we have genuine concerns about this legislation. We think it is vitally important that TCSA be reformed and we do look forward to working with the witnesses, with the majority, and everyone to adopt a plan that is workable, that uses, basic common sense, and provides a balance. Thank you.

[The prepared statement of Mr. Whitfield follows:]

Statement of the Honorable Ed Whitfield Ranking Member, Subcommittee on Commerce, Trade, and Consumer Protection Hearing on H.R. 5820 July 29, 2010

- Mr. Chairman, thank you for recognizing me for the purposes of giving and opening statement. I appreciate that you and your staff have been both cooperative and deliberate in looking at this issue and want to encourage more of that before this committee moves forward with this bill.
- I want to welcome our witnesses and thank them for their time and effort on this legislation. I look forward to their testimony and the question and answer period.
- Mr. Chairman, the breadth and depth of regulation, bureaucracy, scope, and costs under this bill make me very uncomfortable. After our experience with the Toy Bill, where we were all trying to do the right thing for toys, and wound up creating huge problems in one sector. Considering that the American Chemistry Council suggests that 96 percent of a person's day is touched somehow, by chemicals, I am very worried about the level of damage we could do with this bill if we get it wrong.
- Yesterday morning we passed a bill encouraging manufacturing in the United States, yet, it seems to me that we are putting American manufacturing at risk with this very bill. Already, the Financial Times reported on June 20, 2010 that China is poised to end our country's 110year run as the world's leader in factory production.
- Noteworthy to me is that in December 2009, the Bureau of Labor Statistics was projecting that, through 2018, the non-pharmaceutical side of the chemical industry was going to experience a 13 percent decrease in wages and employment while every other industry of the

U.S. economy combined was projected to increase by 11 percent. Among the factors cited for the lack of growth in the chemical sector were environmental regulation and legislation.

- This bill is not just about stricter regulations for a few large chemical companies. This bill is so big and so broad, that its ripple effects will be felt throughout the entire supply chain. So much so that I worry the incentive for any manufacturer to stay in this country will be lost.
- In thinking about this bill, I worry about chemical distribution companies like *Brenntag Mid-South* (located in Henderson, KY) who have begun providing additional services to customers, including repackaging and customized blending of chemicals to create mixtures. Given that distribution companies are a critical component of the supply chain, I worry that companies like it, it many of which have little to no experience with current TSCA, do not have the resources or even the expertise to comply with this legislation.
- In the interest of time, I want to list out a few of my concerns:
  - A company trying to make a new product will need to run an assessment of their product for other areas in commerce where a consumer may come in contact with the "articles" in their new products. This could be especially problematic for automakers whose products are part intensive.
  - The reform bill will require more testing of animals. It does not capitalize on the information EPA already has, nor the treasure trove of information that exists in other countries or programs, like REACH.
  - The approval process through EPA is impossible. Hundreds of Toxicologists and Risk assessors will need to be hired. Even with the extra staffing, it will be long, cumbersome, and time

- consuming. If REACH is any example, their offices have been overwhelmed with paper just on the study portions.
- The so called "safe standard" is so complex and involved with its conditions and caveats, I am not sure what chemical would be able to meet it.
- This bill treats importers (retailers) as manufacturers and makes them liable for products being brought into the United States for sale. An example is a blackberry being sold at Best Buy and Best Buy would be liable in knowing that the product and all of its components meet the safety requirements under the new bill. Retailers are not equipped to make the kids of determinations required by this bill.
- This bill compromises confidential business information by requiring that businesses file all the data on their product to people and makes some of the information available through public databases. We need to guard against foreign competitors stealing this information and reverse engineering our products and economy.
- Finally, this bill creates a user fee to fund the entire operation of this bill. Yet, the user fee is not directed to go to the Agency or its chemicals program. This amounts to a massive standard of living tax on domestic manufacturers and consumers. We should not pursue user fee policies under the guise that they are funding the program in question when they in reality are subsidizing unrelated spending.
- Mr. Chairman, we need to have safe chemicals in commerce in our
  country and in our homes, but I think this bill will compromise
  innovation and make destroy our economy more than it will protect
  human health. I think if we are to do a bill, we need to do it more
  smartly than this. Unfortunately, regardless of my respect for the
  process and the work that went into it, this bill is a non-starter.

• I look forward to the testimony of our witnesses and yield back.

Mr. RUSH. The Chair now recognizes the Chairman of the floor Committee, my friend from California, Mr. Waxman, for 5 minutes.

## OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Waxman. Thank you very much, Mr. Chairman. The Toxic Substances Control Act was enacted in 1976 to product the American People from exposures to toxic chemicals and to steer our chemical industry toward safety and innovation. These were laudable goals and one's we still can agree on. But 34 years later those goals have not been met. TSCA has been tested and found severely deficient. This statute has been fundamentally unchanged for 34 years where it has been amended it is with new titles that address discreet issues and bypass the unworkable structure of the current law. TSCA has become a patchwork, but not a framework. Today Americans are exposed to a staggering number and variety of chemicals even before birth. Yet consumers lack basic information about these chemical exposures and the Federal government is no less in the dark.

EPA lacks critical information about chemical hazards and exposures even though it needs to make decisions about them and they lack the authority to take action even where the risk is clear. The result is that the U.S. is not leading the global move toward safer chemicals, American's public health is not being protected, and American businesses are behind the curve when they should be leading the world in innovative and safe chemical development. We can do better and the legislation Chairman Rush and I and several of our colleagues have introduced will modernize this law.

This bill will address the failures of TSCA and set up a flexible, responsive, and workable system for protecting health and the environment while promoting American jobs and innovation. Under this legislation all chemicals will be subject to a safety review and the burden of proof will be rightly shifted from EPA to chemical manufacturers. Basic safety data will be generated and made public, commercial users of chemicals will get the information they need to make better business decisions. New policies will encourage the development of safer chemicals and created the green jobs of

tomorrow. These are major steps forward.

This Subcommittee has held three hearings this Congress on this important issue. Draft language was circulated in April, followed by a robust and comprehensive stakeholder process. This dialogue was requested by industry and welcomed by environmentalists to move legislation forward and it has resulted in the text we are considering today. There is work still to be done and I look forward to further constructive conversations with my colleagues, all of them, about how best to achieve our common goals.

This bill is the right starting point for this conversation. It is ambitious but also workable, and I believe it is the right thing to do for American consumers and businesses alike. I want to thank Chairman Rush for his leadership on this issue and the Minority for their involvement in the stakeholder process. Just like Chairman Rush, I am hopeful that TSCA reform can proceed on a bipartisan basis and with continued input from the stakeholders. We all

want legislation that improves protection for public health and the environment, as well as continued innovation and job production. I thank all of our witnesses for being here today and I look forward to their testimony. Thank you, Mr. Chairman.

Mr. RUSH. The Chair thanks the Chairman of the Full Committee. The Chair now recognizes Mr. Pitts for 2 minutes.

## OPENING STATEMENT OF HON. JOSEPH R. PITTS, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. PITTS. Thank you, Mr. Chairman. Thank you for holding this hearing on H.R. 5820, The Toxic Chemicals Safety Act of 2010. Let me begin by saying that none of us wants harmful and dangerous chemicals to endanger public health and the environment. I have children and grandchildren and grandchildren and their safety and wellbeing is of the upmost importance to me. However, this bill before us today creates such a burdensome framework for chemicals to be approved that I am concerned that it will not actually achieve its intended purpose.

The existing law, The Toxic Substance Control Act is responsible for identifying and regulating toxic substances in the United States Commerce. It is a risk base statute that requires the EPA to regulate against unreasonable risk and to do so in a—in the least burdensome way. The existing law also contains preemption provisions that do not allow states to establish testing and other requirements that conflict with existing federal laws. Yet H.R. 5820 completely revamps TSCA and mandates unrealistic testing which essentially calls for the complete absence of any risk associated with a chemical.

According to the National Association of Manufacturers this is "an impossible goal that will hamper lower risk beneficial products from coming to the market." In addition NAM calls the new safety standard "an unworkable risk assessment methodology for every chemical substance and for all EPA prioritized mixtures." Additionally Section 18 of H.R. 5820 eliminates federal preemption by permitting that each state or locality to enact any law regulation on chemicals under the purview of TSCA as long as compliance with both federal and state law is not impossible. Mr. Chairman, if this bill becomes law severely hamper our economy, it will hamper innovation, it will encourage chemical companies to go offshore and unemployment will increase, and our nation will suffer.

I urge a thoughtful reconsideration of this bill while carefully evaluating risk including hazards, exposures, intended uses, and the impact to the economy and let those—these factors inform and guide our any regulatory action. I appreciate the witnesses being here today, look forward to listening to their testimony, thank you, and I yield back.

Mr. Rush. The Chair recognizes the gentleman from New Jersey, Mr. Pallone for 2 minutes.

## OPENING STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. Pallone. Thank you, Mr. Chairman. I do have to start out by responding to Mr. Whitfield's comments. I like Mr. Whitfield a lot but I have to that on the one hand I was happy that he recognized the Democratic agenda of Make It in America. And he also indicated that he supports it. I was a little surprised because I think that many times Republican support of free trade bills, which we had a proliferation under President Bush, you know don't seem to do much to protect American jobs, and I am often really not sure if the Republican leadership really cares about preserving jobs here anymore with all their free trade advocacy. But I know now that at least Mr. Whitfield at least supports our Make It in America

agenda and I do appreciate that.

I also wanted to thank you, Mr. Chairman for holding the hearing today on a very important subject and that is TSCA. The original TSCA law was enacted in '76, and it is clear that this law had failed to sufficiently—failed to protect public health and our environment. It was supposed to allow the federal government to keep harmful chemicals out of Commerce, but provisions in the law have kept EPA from being able to collect the data necessary to even determine what chemicals are harmful. With over 80,000 chemicals in Commerce in the U.S., and roughly 700 new chemicals introduced every year, EPA has only been successful in regulating limited use of five chemicals under the TSCA statute. And the provisions in this will place so much burden on the EPA they even run into trouble banning asbestos which we know is extremely hazardous to human beings.

The problem stems from the burden being placed on the EPA to approve a chemical is unsafe when the agency does not have access to the data required to make that case. Reform is necessary and I commend the committee and the EPA for taking this issue seriously. I think that the legislation before us would make a big difference. And I also wanted to mention that the EPA Administrator Lisa Jackson invited members of this Subcommittee to her office to personally discuss this issue last year. And it was nice to have the opportunity to sit down with her and talk about TSCA, because I know she is very concerned about it. Thank you, Mr. Chairman.

Mr. Rush. The chair thanks the gentleman. The Chair now recognizes Mr. Latta for 2 minutes.

### OPENING STATEMENT OF HON. ROBERT E. LATTA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. Latta. Thank you, Mr. Chairman, Ranking Member Whitfield, thank you for conducting this hearing on The Toxic Chemicals Safety Act of 2010 which will have a significant impact on the Midwest. I represent the fifth District of Ohio which is the State's largest agricultural and manufacturing district. As we are all too painfully aware, America's manufacturing sector has been hard hit. In my district many farmers are dependent on these outside manufacturing jobs to supplement their agricultural incomes. I strongly feel that we cannot pass the proposed legislation in its current

form since manufacturing and agriculture would be put at a great

disadvantage against our overseas competitors.

Congress needs to help businesses by encouraging job growth, helping to spur innovation, and retaining jobs in the United States. I have grave concerns that the EPA under its broad authority within this legislation would do more harm than good. American farmers and ranches provide hundreds of millions of people with the safest, most affordable, and most abundant food supply in the world. This is all done with less than two percent of Americans engaged in agriculture compared to 40 percent in 1900. This legislation will lay claim to many chemicals and keep valuable food and commodities off the shelves from American families.

Our American farmers and ranchers are the environmental stewards of this earth and they do everything in their power to protect it, their families, and their neighbors. This legislation will be extremely disruptive and detrimental to AG production. As members of Congress we have an obligation to protect human health and the environment, however many can argue that this bill fails to accomplish this instead will cost American jobs, lower the standard of living, and will empower our overseas competitors.

Mr. Chairman, I look forward to today's hearing and hearing from our witnesses. And I hope the Subcommittee keeps in mind that chemicals affect roughly 96 percent of our daily lives, and this bill will need to be thoroughly better. Thank you, Mr. Chairman,

and I yield back.

Mr. RUSH. The Chair now recognizes the Chairman Emeritus of this small committee, my friend from Michigan, Mr. Dingell, for 5 minutes.

## OPENING STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. DINGELL. Mr. Chairman, I thank you for your courtesy, and I commend you for holding this hearing today. There is wide agreement and experience tells us that The Toxic Substances Control Act needs to be reformed. After 33 years it has been blatantly clear the law needs a thorough examination and reauthorization. We have heard about this from industry, from environmental groups, and from consumer advocacy organizations. Indeed EPA has not

banned a single chemical under TSCA for nearly 20 years.

Despite our best intentions back in 1976, TSCA is not working as we hoped that it would when it was enacted. We simply must be doing something in an effort to protect the public from exposure to harmful chemicals. This must be done by using sound and reliable science as the basis. Further, I must bring up an important factor that all too often gets neglected: funding. As we work to reauthorize and revise TSCA, we must work to have an adequate and consistent stream of funding for the program. Without proper funding we will not get results and will lead to a constant source of frustration for everyone involved including industry which desperately needs certainty in order to compete in a global market-place.

I am pleased that the committee has convened a series of stakeholder discussions. This is very important and it is important to consumer advocates, environmental groups, and industry play a role as this process moves forward. I sincerely hope that the process continues and that stakeholders will continue to be consulted as we move forward. I would note that we are still at the beginning of this process and not at the end. And while I feel we must move with speed and expeditiousness, I want to point out that undue

haste can result in serious problems.

Mr. Chairman, we have our work cut out for us in reforming The Toxic Substances Control Act. We clearly need to protect the public, but we need to do so in a way that does not stifle innovation and that protects American manufacturing and industry, something that we have been hearing quite a bit about lately. The United States has at this time a very fragile economy and we cannot afford to lose any more jobs in this country than we have already lost. In fact we have to work to actually create jobs through legislation like this.

This committee has a long and a proud history of taking on the most difficult legislative challenges and turning out good quality and not infrequently bi-partisan bills that have gone on to be both successful in terms of protecting people that we represent and protecting their jobs and financial security. I am hopeful that reforming The Toxic Substances Control Act could be another story of success by this committee. I look forward to hearing our witnesses and to working with you, Mr. Chairman and the Committee on this important matter. I yield back the balance of my time.

Mr. RUSH. The Chair now recognizes the gentleman from Texas, my friend, Mr. Barton for 5 minutes, the Ranking Member of the

Subcommittee.

### OPENING STATEMENT OF HON. JOE BARTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. Barton. Well, thank you, Chairman Rush. And I also want to thank Chairman Waxman, and former Chairman Dingell and of course our Ranking Member Mr. Whitfield on this Subcommittee for their excellent work so far on this subject and this Congress. I am going to submit my formal statement for the record and I am going to read a little bit from the Republican Memo on this hearing because I think it is by itself a fairly good opening statement. This is from the Republican memo on this hearing. It says on July the 22nd, 2010, Chairman Waxman and Chairman Rush introduced legislation entitled The Toxic Chemical Safety Act. This legislation would dramatically rewrite Title I of the Toxic Substance Control Act or TSCA.

This legislation is introduced following the circulation of discussion draft in April, followed by 10 listening sessions for various stakeholders to express their views on potential improvements to the technical and policy parts of the draft legislation. TSCA enacted in 1976 gives the EPA authority to regulate the manufacture, processing, distribution, and commerce use and disposal of chemical substances and mixtures. For the purposes of this memo discussion draft Title I which has the actual authorities related to generic chemical regulation is the focus. Title I of TSCA is the only federal environmental law that explicitly gives EPA broad power to regulate domestic manufacturing.

In addition, Title I provides EPA authority to gather data on chemicals, review petitions for the use of new chemicals and take action against imminent threats to the environment and the public health. TSCA is a risk based statute that requires the EPA to regulate against an unreasonable risk and to do so in the "least burdensome way. Interestingly section 6C of TSCA requires the EPA to use another environmental law besides TSCA if a risk of an intruding human health or the environment could be eliminated or reduced in a sufficient—to a sufficient extent by actions taken under another federal law."

Finally TSCA contains preemption provisions that do not allow states to establish testing and other requirements that conflict with existing federal laws. Mr. Chairman, TSCA has been referred to by the current EPA administrator as a model federal law. And yet the discussion draft that yourself and Chairman Waxman have introduced radically changes TSCA. It sets a safety standard that probably could not be met. It changes the burden of proof; I mean it is 170 degrees in its change in direction from the current law which is in my opinion working well.

So I want to commend you, Chairman Rush, and the full Committee Chairman Mr. Waxman for the process. To your credit you have put your discussion draft out, you have listened to stakeholders, you have had meetings with myself, and Mr. Whitfield, and other Republicans, and you have indicated that you are not going to have a rush to judgment and no pun intended, Chairman Rush on this legislation. We have got an expert panel here today including the Administrator of the program at EPA. I suggest that we re-listen to them before we decided what to do.

I think it is apparent given that today and tomorrow are the last two days we are going to be here before the middle of September, and when we get back in September we are not going to be in session hopefully more than two to three weeks before we break for the campaign for the election. It is very unlikely that we can—are going to do anything on TSCA unless we decide that you wanted to just do a straight, clean, reauthorization. Based on this discussion draft, that doesn't appear to be our intention of our friends on the Majority. So this is a very important hearing, because it probably sets the floor for discussion and act in this area in the next Congress. And with that, Mr. Chairman, I yield back. I do appreciate the hearing, and I do again appreciate the process of the—of listening, and discussing, and sharing that have been exhibited on this issue so far in this Congress. Thank you, Chairman Rush. [The prepared statement of Mr. Barton follows:]

## Statement of the Honorable Joe Barton Legislative Hearing on H.R. 5820, the Toxic Chemicals Safety Act of 2010 Subcommittee on Commerce, Trade, and Consumer Protection July 29, 2010

Thank you, Mr. Chairman.

I would like to commend you and Chairman Waxman for not rushing this bill through committee. And I appreciate that my staff was included in your meetings with stakeholders. But I think we must still explore the existing program and only then propose appropriate, workable solutions.

I, of course, want our citizens protected from harmful exposure to chemicals. I also want to caution against accelerating the process now because we all know that a rush to regulate is likely to do more harm than good. We saw the unhappy consequences of haste with the toy bill, and that experience should stand as an example of why getting it done right is usually so much more important that getting it done right now.

As drafted, this bill would have sweeping ramifications for our economy. By regulating all entities that make, process, sell, or dispose of anything with a chemical in it, including consumer goods, it directly impacts every business, every home and every person in America and shuffle every level of a nationwide manufacturing economy that was struggling even before the recession drove unemployment to nearly 10 percent.

In fact, long before the discussion draft was introduced, the Bureau of Labor Statistics projected that, through 2018, the non-pharmaceutical side of the chemical industry would suffer a 13 percent *decrease* in wages and employment while every other industry of the U.S. economy combined was projected to *increase* by 11 percent. Environmental regulation and legislation were listed as a cause of this steep decline. I worry that this bill will only exacerbate this decline and without good justification.

Let me be more specific about some of the reasons I am so troubled by this legislation.

First, the testing requirements in the bill are so over the top that they remind me of the same mistakes made in the toy bill. The bill requires manufacturers and processors to submit so called "minimum data sets" to EPA on every chemical they make. It disregards whether EPA already has the information and it denies the ability to petition EPA if the requirements are unnecessary in the individual case. These provisions create bureaucracy for its own sake, waste taxpayer dollars, needlessly require animal testing, and divert the efforts of research labs from newer and greener products to handling compliance work, instead.

Secondly, the current administrator of the EPA says the current program dealing with new chemicals is a model program. Yet, this bill overhauls

that model program and makes it harder instead of easier to get newer, safer products to consumers.

Thirdly, the so-called safety standard is neither safe nor standard because it is so impractical. I am not sure what chemical or combination could ever meet the test of "reasonable certainty of no harm." Presidents and hermits are that sheltered, but ordinary people sometimes need to cross the street. This standard was plucked from existing pesticide law that regulates poisons used on food. Most TSCA-regulated chemicals are not part of any person's normal diet.

Finally, the pre-emption provisions in the bill are just irresponsible. It incentivizes states to enact conflicting laws, which will only undermine the national marketplace and make products more expensive for everybody.

Mr. Chairman, I think this bill is unworkable. I am open to being convinced otherwise by our witnesses, but that's going to be a steep order. Americans don't want unsafe chemicals. They also don't want feckless regulations that kill their jobs and make life harder. The federal government has a blind spot for how ordinary Americans live and knack for making it tougher on them through well-intentioned bills like this one.

Thank you and I yield back.

Mr. RUSH. The Chair thanks the Ranking Member and now recognizes Mr. Green, gentleman from Texas for 2 minutes.

#### OPENING STATEMENT OF HON. GENE GREEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. Green. Thank you Mr. Chairman for holding this hearing. I would like to welcome both our panels. I want to thank all the stakeholders for their participation in the process over the last few months. Your input is valuable to us and as we work towards reforming TSCA. I also want to thank the Committee for considering the input in consideration as the bill was crafted. I hope this dialogue will continue as the bill moves through the Committee process.

In 1976 The Toxic Substance Control Act was written to ensure that human health and environment effects on—of chemical substance were identified and properly controlled prior to placing these materials in Commerce. However, since then recognition that the bill needs to be updated to give the EPA the necessary authority to oversee and regulate chemicals that are hazardous to human health and the environment has only grown to the point that EPA is no longer seen as an effective regulator of consumer products. This need to regulate has been recognized by industry participants as well as consumer, labor, and environmental advocates alike. So while it is broadly recognized that changes need to be made in TSCA, there remains to be some disagreement over the scope of these changes, and I look forward to hearing from our witnesses today on their thoughts on the bill before us.

While I appreciate the Committee's work on this bill, I do have some concerns about changes made in the new chemicals program and whether the timelines included in the bill for the EPA to complete their work on reviewing existing chemicals are realistic from a time and personnel perspective. I believe it is important that TSCA reform protects consumers, workers, and the environment while encouraging innovation and ensuring a workable regulatory program. As we move forward I steep that balance in these objections with the end result that is beneficial for both the environment consumers and businesses, and I look forward to working with our Chairman and our Ranking Member. And again thank you, and I yield back my time.

Mr. Rush. The Chair now recognizes Dr. Gingrey for 2 minutes.

### OPENING STATEMENT OF HON. PHIL GINGREY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF GEORGIA

Mr. GINGREY. Mr. Chairman, thank you. I have got a written statement and I would like to submit it for the record. I may paraphrase some of it, but the distinguished Chairman Emeritus remarks are basically the way I feel about this reauthorization of TSCA. It is necessary. I feel sure that it is necessary. It has been a long time since the law was basically passed back in 1976. And certainly we don't want to expose the public to harmful chemicals; Not one of the 84,000 under the jurisdiction of TSCA. But when I read some of these testimonies, I haven't read every word of every testimony, of course you always bring up what the harmful effects are on the children.

Now I am a physician and indeed an OB-GYN physician. I have delivered 5,200 children, babies, and I am concerned about them. Of course I am concerned about everybody, but I think there is a great risk here of getting to the point where we literally scare the bejesus out everybody. In fact I was reading one of the testimonies, I don't think I—well, I can find it. I was—go real quickly to page one and we are going to hear from Mr. Owens, but in the second paragraph the last sentence it says and maybe this is just a typo, the time has come to bring TSCA into the 21st century and give the American people the protection from harmful chemicals they expect. So they expect harm from the chemicals? That probably should have read the American people the protection they expect from harmful chemicals. So you know I have some real concerns about overshooting here. I think I went into-went to Georgia Tech as a co-op student back in 1960, and I said I am going to major in chemistry because I love that ad that DuPont had: Better things for better living through chemistry. And so you know, it is good to regulate and make-protect people and everything, but let us not throw the baby out with the bathwater here. And I really do look forward to your testimony. Mr. Chairman, I yield back.

[The prepared statement of Mr. Gingrey follows:]

Rep. Phil Gingrey
Opening Statement for Hearing on H.R. 5820 – TSCA Overhaul
Commerce, Trade, and Consumer Protection Subcommittee
July 29, 2010

Mr. Chairman, thank you for calling today's hearing on H.R. 5820 – the Toxic Chemicals Safety Act of 2010. This legislative hearing is on the legislation that will overhaul the Toxic Substances Control Act of 1976.

Under current policy, TSCA directs the

Environmental Protection Agency to regulate all
phases of the manufacturing of chemicals and
identify unreasonable risk of injury from new or
existing chemicals. In regulating these chemicals,

TSCA directs the EPA to use the "least burdensome option" to reduce the risk of harm while balancing the benefits provided by the chemical. As a risk-based law, TSCA relies on the presence of sound science from both the chemical producers and the EPA in order to properly implement this law.

Mr. Chairman, the legislation that we have before us today will fundamentally change our current system to one that is hazard-based. I would like to remind my colleagues that the use of chemicals impacts 96% of everything in the stream of

commerce, which means that this legislation will impact nearly everything on the market from raw material to retail.

As we all know, Article I, Section 8 of the Constitution calls on Congress to regulate commerce. One of my biggest fears regarding H.R. 5820 is that because 96% of commerce is directly impacted by the chemical industry in some way, we will now be asking EPA to – for all practical purposes – control commerce.

Furthermore Mr. Chairman, H.R. 5820 will only grow the size of the federal government and substantially increase compliance costs for companies during production. Unfortunately, there are some things that the Majority will not tell you about this legislation.

The most important is that these compliance costs will either be passed along to consumers or will force small to mid-sized companies to shut their doors – shedding even more jobs in this country

when we have 9.5% unemployment and 16 million people out of work.

Mr. Chairman, I believe that this is dangerous legislation before us today, and I ask that each member of the Subcommittee listen and learn about how this legislation will negatively impact our economy as a whole.

I yield back.

Mr. RUSH. The gentlewoman from Colorado, Ms. DeGette is recognized for 2 minutes.

## OPENING STATEMENT OF HON. DIANA DEGETTE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Ms. DEGETTE. Thank you very much, Mr. Chairman. I think we should put this into perspective. We have 80,000 chemicals present in Commerce today and many Americans assume that these potentially toxic substances are heavily regulated and are therefore safe. But somehow, only 200 of the 80,000 chemicals have been required to undergo EPA mandated testing. Only five are currently under EPA restrictions. And even more alarming is that American babies even before they are born are exposed to more than 350 industrial chemicals, pesticides, and pollutants, most of which are subject to little or no regulation. Now the reason why we have this situation is because TSCA is just frankly inadequate and outdated.

When this law was first put into effect in 1976 it was a ground-breaking piece of legislation that took steps to limit the country's exposure to harmful chemicals and toxins. But despite its initial success, TSCA failed to anticipate the scientific and technological developments of the next 30 years that would result in unprecedented numbers of chemicals. This updated legislation has a lot of good benefits. It vastly improves our ability to monitor commercial chemicals, it has strong disclosure requirements, and equally importantly it doesn't stop at regulation of current chemicals, but also inspires innovation with incentives to encourage the development of new, safer chemical alternatives. And it is our hope that many of the companies that currently rely on potentially harmful and toxic chemicals will look at the feasibility of safer options.

So Chairman, I am proud to be an original co-sponsor of this legislation. It was developed with input from everybody and I think the resulting Act will better equip our regulatory agencies to fight the dangers. I commend you, I commend the committee staff, and I hope that our friends on the other side of the aisle will work with us as we move forward on it.

Mr. Rush. The gentleman from Louisiana, Mr. Scalise is recognized for 2 minutes.

## OPENING STATEMENT OF HON. STEVE SCALISE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. Scalise. Thank you, Mr. Chairman for having today's hearing on The Toxic Chemical Safety Act, a bill that would dramatically change chemical regulation in the United States, and severely impact every sector of our economy particularly places like my home State of Louisiana that are so dependent on the chemical industry. Mr. Chairman, Louisiana rates second in the nation in total chemical industry value output and we are the ninth largest employer of chemical industry workers in the country.

In addition there are more than 100 major chemical plants located in my state not to mention the many petrachemical refiners, chemical processors, distributors, exporters, and retailers that all work in Louisiana and provide thousands of quality high paying

jobs. Simply put the chemical and petrachemical industries are the very backbone of our state's economy and the future in economic well being would be threatened if H.R. 5820 were to become law in its present form. I have very serious concerns about the legislation and the consequences it would have for our chemical industry. First, the scope of the legislation is extremely broad. EPA would be given unprecedented new authority to regulate chemical substances, mixtures, and articles and the bill would require a minimum data set for every chemical and mixture distributed in Commerce. And every chemical and mixture will be subjected to scores of job killing new regulations. No one in the supply chain would go untouched.

The scope of this legislation also brings its workability in to question. I believe the EPA's resources will be overwhelmed and the chemical industry will be overburdened with the tracking and reporting requirements under the bill. It piles up massive regulatory burdens on the chemical industry and it gives powers to the EPA that will not be able to accomplish, which will disrupt Commerce and put the industry and EPA into a never-ending loop of review. Another serious concern I have is the bill's treatment of confidential business information. The chemical makeup of commercial chemicals and mixture components will be compromised meaning that crucial trade secrets and intellectual property will be lost. Why would a chemical manufacturer or processor try to develop new chemicals or seek new innovative mixtures in America when their work will be made available to their competitors if they make it here rather than a foreign country?

And finally, Mr. Chairman, this legislation removes the current TSCA requirement that EPA analyze a new regulations effects on employment. This is proof that the proponents of this legislation know how damaging this bill will be to jobs in the chemical industry, and it flies in the face of claims by this Administration, and the liberals running Congress that their focused on jobs. And really I guess the proponents of this legislation don't want the EPA to look at the impacts of jobs when the bill gives the EPA the authority to shut down businesses and plants. It doesn't take a Ph.D. in economics to understand the impact there. Those actions will destroy jobs. This legislation will cause serious harm to the chemical industry and put thousands of hard working Americans out of work. While I am for ensuring that safe chemicals are being manufactured and used in Commerce we must create—we must not create new federal powers that will defer innovation, destroy American competitives, and kill jobs. Thank you, I yield back.

Mr. RUSH. The Chair now recognizes the gentleman from Texas, Mr. Gonzales for 2 minutes. The gentlelady from Florida Ms. Castor is recognized for 2 minutes.

### OPENING STATEMENT OF HON. KATHY CASTOR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Ms. Castor. Good morning and thank you, Chairman Rush very much for this hearing and all of your leadership during this session of Congress on TSCA reform including H.R. 5820 The Toxic Chemical Safety Act which I am proud to be an original co-sponsor. You know toxic, or comprehensive TSCA reform has now been put off

for a generation, an entire generation. But we have an opportunity now to confront the threats with toxic chemicals posed to the public health, and to our families, and to your communities. I mean it was 1976 when The Toxic Substances Control Act was passed and there were already more than 60,000 chemicals in production in the United States. And we knew very little about the health and environmental impacts. Unfortunately TSCA proved to be very weak and inadequate. EPA required testing on a mere 200 chemicals despite the years of solid science that has shown that many, many more are highly toxic. Even more concerning the EPA regulates just five of the more than 80,000 that are now in circulation. We can do so much better. This is the United States of America. We have the science; we have the experts. A particular concern are the consistent biocumulative toxic chemicals—these PVTs pose an especially worrisome threat to our communities because they build up in the food chain, and the human body, and they linger for years, and because they increase the risk of breast cancer, and brain cancer, autism, asthma, reproductive disorders, and birth defects. The good news is that we are now the threshold to make real progress. We have terrific experts here today. We have dedicated colleagues throughout the halls of Congress and professional staff, and all of you that are ready to help us modernize chemical regulation. After—so after 34 long years it is time to take action starting with the worst offenders including PVTs. It is time to alter the burden of proof, move away from the research and delay strategy that has done a lot of harm to consumers and families. There is so much at stake for the public health, and our families, and consumers across America, so I am hopeful that we are going to make progress. Thank you and I yield back.

Mr. Rush. The chair now recognizes the gentleman from Pennsylvania, Mr. Murphy for 2 minutes.

## OPENING STATEMENT OF HON. TIM MURPHY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. Murphy of Pennsylvania. Thank you, Mr. Chairman. The Toxic Substance Control Act of 1976 is in need of critical updates. Since it was written, thousands of more chemicals have been invented; many have substantially improved public health and prolonged life. Vehicles made lighter and safer, building materials stronger and safer, medical devices and material coatings that are more useful, reduce rejection by the body, improve medication effectiveness, and reduce infection of risk. Farms are more productive and for all these we are thankful for the scientific inventions.

On the other hand there have also been new chemicals associated with harm and public health. Further substances previously thought safe were later deemed unsafe after years of research or after new technologies were developed to test substances. New technologies not available at the time the product was invented. In 1899, Charles Duell, the then Commissioner of the U.S. Patent Office declared "everything that can be invented has been invented." Well we recognize now how out of step he was, but we are at risk of applying and codifying a similar standard today. If we were to apply a far reaching standard that says "ensures for all intended

uses with regard to public health that there is a reasonable certainty that no harm will result" I fear this standard must assume that every test that can be invented has been invented, that every outcome that can be anticipated has been anticipated, that every long term cumulative effect of everything has been measured in every way thinkable and not yet thinkable. This legislation assumes that the EPA is capable of doing these things but assumes excuse me the EPA is incapable of doing all these things, but it assumes all private industry is capable of meeting this standard. Rather it assumes a standard of "We can't tell you exactly what it is, and we can't do it ourselves, but you're responsible for knowing what we meant now and the future with the tools you don't have. Now I will support standards which say we must work with industry, not abdicate the EPA's or the FDA's or anybody else's role in independently assessing product safety. But it is difficult to have a standard applied that no one can quite define but we say we want you to assume all risk. If we are apply and zero risk standard legislation we would pass no bills. I hope that this Committee will continue work on this very, very important issue to move forward on public health, but let us not immobilize our systems and standards, and let us help promote further inventions in the scientific community. Thank you.

Mr. Rush. The gentleman from Illinois will pass, the Vice Chairman of the Subcommittee. Ms. Schakowsky is recognized for 2 minutes

## OPENING STATEMENT OF HON. JANICE D. SCHAKOWSKY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Ms. Schakowsky. Thank you, Mr. Chairman. I want to take just a different perspective on Mr. Owen's statement that my good friend Mr. Gingrey pointed out in the testimony that the time has come to bring TSCA into the 21st Century and give American people the protection from harmful chemicals they expect. I want to use as case in point the issue of asbestos. Eight thousand Americans die each year from complications associated with exposure to asbestos. In 1989, the Environmental Protection Agency attempted to use TSCA to issue a rule to ban the use of asbestos citing the strong evidence of hundreds of studies that conclusively found that asbestos was extremely hazardous to workers and the public as a whole. And despite the overwhelming evidence the U.S. Court of Appeals reversed that decision saying that the EPA had not fulfilled the necessary burden of proof under TSCA. In Mr. Owen's testimony he cites the inability of EPA to phase out the use of asbestos in products despite the "unanimous scientific opinion about the risk" as an example of TSCA's ineffectiveness. Now I would actually like to see, there is a process that would allow asbestos to be phased out. I would like it actually to go even faster and to allow the EPA to have the authority to immediately ban the most highly toxic substances like asbestos that including long lasting chemicals known as persistent bioaccumulative toxic pollutants (PBT's) that build up in the food chain to levels that are harmful to human health and cause environmental harm. But certainly we want to empower the EPA to do the—to be able to remove from the

environment those things that we know are killing people. And right now that is not even the possibility. So I am glad that we are doing this. I highly support, heartily support the bill. I am a cosponsor, and I yield back.

Mr. RUSH. The Chair recognizes Mr. Space for 2 minutes.

#### OPENING STATEMENT OF HON. ZACHARY T. SPACE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. SPACE. Thank you, Mr. Chairman. I would like to thank you and Ranking Member Whitfield for holding today's hearing on TSCA reform legislation. I am encouraged that we have made some significant process on this priority and I am especially pleased that you and your staff engage in lengthy stakeholder process following the creation of a draft bill and prior to introducing the legislation that is before us today.

All of us want to see TSCA modernized because we agree that our current regulatory framework is broken. Indeed even the industry itself has made that explicit acknowledgement. All of us strive for safe communities and livable environments. And during this time of economic down turn part of creating a livable environment is ensuring that we are maintaining jobs and the American industries that support them. I think it is important to understand that there is-this is not a black and white situation here. It is a very grey area and finding that balance is critical to our success as a legislature in dealing with an issue which is admittedly one of grave concern to a lot of people. I look forward to working with you, Mr. Chairman, and members on both sides of the aisle as we piece together legislation that protects both the health of our families, and the jobs that provide for them. And I happen to be one who thinks that we can do so in an effective fashion with regards to both concerns. And with that, Mr. Chairman I yield back.

Mr. Rush. The Chair now recognizes the gentlelady from Ohio, Ms. Sutton for 2 minutes.

Ms. SUTTON. Thank you, Mr. Chairman. And thank you very much for holding this very important hearing. I am going to submit my statement for the record, but this is a critical issue and I look forward to hearing what the witnesses have to say about how we might be able to strengthen and perfect this bill going forward. Thank you, I yield back.

[The prepared statement of Ms. Sutton was unavailable at the time of printing.]

Mr. RUSH. This hearing now will entertain a unanimous consent request that Mr. Tim Murphy from Connecticut—Christopher, I am sorry, Mr. Christopher Murphy from Connecticut be allowed to sit with the panel for the purposes of questioning the witnesses, and to make some introductory remarks to one of his former constituents and colleagues Dr. Mitchell. Hearing no objections, so ordered. Mr. Murphy, you will be allowed to participate in the questioning of the witnesses. Now it is my privilege and honor to introduce our five panelists who have sat by very patiently while the members address their opening statements. And I want to introduce the panel now. To my left we have Mr. Steve Owens who is the Assistant Administrator of the Office of Chemical and—Chemical Safety and Pollution Prevention for the EPA. Next to Mr. Owens is Dr.

Richard Denison. He is a Senior Scientist for the Environmental Defense Fund. And next to Dr. Denison is our former colleague and outstanding member of Congress and he now is the President and Chief Executive Officer of the American Chemistry Council, Mr. Cal Dooley. And next to Mr. Dooley is Mr. Ken Cook who is the President of the Environmental Working Group. And seated next to Mr. Cook is Mr. Howard Williams the Vice President of Construction Specialties, Incorporated of Muncy, Pennsylvania. And seated next to Mr. Williams is Dr. Mark Mitchell, the president of the Connecticut Coalition for Environmental Justice. And seated next to Dr. Mitchell is Ms. Beth Bosley. She is the Managing Director of Boron Specialties, LAC—LLC of Valencia, Pennsylvania. And she is testifying on behalf of The Society of Chemical Manufacturers and their Affiliates. And so again welcome to each and every one of you. And it is the practice of this Subcommittee to swear in the witnesses so I will ask if you would please stand and raise your right hand.

[Witnesses sworn.]

Mr. Rush. Please be seated. Let the record reflect that the witnesses have all answered in the affirmative. Now the Chair recognizes the witness Mr. Owens for 5 minutes.

TESTIMONY OF STEVE OWENS, ASSISTANT ADMINISTRATOR, OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION, ENVIRONMENTAL PROTECTION AGENCY; RICHARD DENISON, SENIOR SCIENTIST, ENVIRONMENTAL DEFENSE FUND; CAL DOOLEY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AMERICAN CHEMISTRY COUNCIL; KEN COOK, PRESIDENT, ENVIRONMENTAL WORKING GROUP; HOWARD WILLIAMS, VICE PRESIDENT, CONSTRUCTION SPECIALTIES, INCORPORATED; MARK MITCHELL, PRESIDENT, CONNECTICUT COALITION FOR ENVIRONMENTAL JUSTICE; AND BETH BOSLEY, MANAGING DIRECTOR, BORON SPECIALTIES, LLC, SOCIETY OF CHEMICAL MANUFACTURERS AND AFFILIATES

#### TESTIMONY OF STEVE OWENS

Mr. OWENS. Good morning. Chairman Rush, Vice Chair Schakowsky, Ranking Member Whitfield, Chairman Emeritus Dingell and other members of this Subcommittee and the full Committee, thank you for the opportunity to be with you today to discuss modernizing The Toxic Substances Control Act or TSCA as it is commonly known. The outside—I am sorry, Mr. Chairman, can you hear me now? Is that better? Sitting here at the little boys table, so I got to sprite you up a little bit more. So but at the outset, Mr. Chairman, I want to thank you and Chairman Emeritus Dingell, and other members of this Subcommittee for the tremendous leadership you have shown on this very important issue. As EPA Administrator Lisa Jackson has said on many occasions the public expects the government to provide assurances the chemicals have been assessed with the best available science and that unacceptable risk has been eliminated. Restoring confidence in our chemical management system is a priority for EPA and this Administration. TSCA regulates chemicals manufactured and used in this country.

And while TSCA was an important step when it was first passed in 1976 it is the only major environmental statute that has not been reauthorized since its passage. TSCA is clearly showing its age and its limitations. Over the last 34 years TSCA has proven inadequate for providing the protection against chemical risks that the public rightfully expects. Unlike the laws applicable to drugs and pesticides, TSCA does not have a mandatory program by which EPA must review the safety of chemicals. In addition, TSCA places legal and procedural requirements on EPA's ability to request the generation and submission of health and environmental data on chemicals.

When TSCA was enacted in 1976, it grandfathered in without any evaluation whatsoever the more than 60,000 chemicals that existed at that time. More than 24,000 additional chemicals have been produced since then with the result that EPA's TSCA inventory now lists more than 84,000 chemicals. Very few of which have actually been studied by EPA for their risks to families and children. Indeed TSCA does not provide EPA adequate authority to reevaluate existing chemicals as new concerns arise or as science has updated. And it does not give EPA full authority to require chemicals to produce toxicity data. As a result, in the 34 years since TSCA was passed, EPA has been able to require testing on only around 200 of the more than 84,000 chemicals now listed on the TSCA inventory as several members of the Subcommittee have noted. It has also been difficult for EPA to take action to limit or ban chemicals found to cause unreasonable risk to human health or the environment. Even if EPA has substantial data and wants to protect the public against known risks, the law creates obstacles to quick and effective regulatory action. For example as Vice Chair Schakowsky and other members of this Committee, in 1989 after years of study and nearly unanimous scientific opinion EPA issued a rule phasing out most uses of asbestos in products, and yet a Federal Court overturned most of this action because the rule had failed to comply with the requirements of TSCA. In fact, since 1976 only five chemicals have been successfully regulated under TSCA's authority to ban chemicals.

The problems with TSCA are so significant that the Governmental Accountability Office has put the law on its high risk list of items needing attention. Today advances in toxicology and analytical chemistry are revealing new pathways of exposure. There are subtle and troubling effects of many chemicals on hormone systems, human reproduction, intellectual development, and cognition particularly in young children. It is clear that TSCA must be updated and strengthened if EPA is to properly do its job of pro-

tecting public health and the environment.

Last September Administrator Jackson announced a set of principles on behalf of the Obama Administration to help fix TSCA. First, chemicals should be reviewed against safety standards that are based on sound science and reflect risk based criteria protective of human health and the environment. Second, responsibility for providing adequate health and safety information should rest on industry and EPA should have the necessary tools to quickly and efficiently require testing or attain other information from manufacturers relevant to determining the safety of chemicals without

the delays and obstacles currently in place, and without excessive claims of confidentiality. Third, EPA should have clear authority to take risk management actions when chemicals do not meet the safety standard with flexibility to take into account a range of considerations. Fourth, EPA should have clear authority to set priorities for conducting safety review. Fifth, we must encourage innovation in green chemistry, and support strategies that will lead to safer and more sustainable chemicals and processes. And finally, implementation of the law as Chairman Emeritus Dingell pointed out should be adequately and consistently funded in order to meet the goal of assuring the safety of chemicals and to maintain public confidence that EPA is meeting that goal.

Manufacturers of chemicals should support the costs of Agency implementation including the review of information provided by manufacturers. Mr. Chairman, a time has come to bring TSCA into the 21st century and the legislation you have introduced is a big step toward doing just that. Administrator Jackson and I look forward to working with you, other members of this Subcommittee, and members of Congress on this very important issue. And I will be happy to answer any questions you might have.

[The prepared statement of Mr. Owens follows:]

Testimony of Steve Owens
Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
before the
Subcommittee on Commerce, Trade, and Consumer Protection
Committee on Energy and Commerce
U.S. House of Representatives

#### July 29, 2010

Good morning Chairman Rush, Ranking Member Whitfield, and Members of the Subcommittee. Thank you for the opportunity to address the Committee today on the reform of chemicals management in the United States and the newly introduced Toxic Chemicals Safety Act of 2010. Ensuring chemical safety in a rapidly changing world, restoring public confidence that EPA is protecting the American people, and promoting our global leadership in chemicals management are top priorities for EPA and our Administrator, Lisa Jackson.

Chairman Rush, I want to thank you, Chairman Waxman, as well as members of this Subcommittee for your leadership on this very important issue and your efforts to bring about comprehensive reform of the Toxic Substances Control Act (TSCA). The time has come to bring TSCA into the 21<sup>st</sup> Century and give the American people the protection from harmful chemicals they expect.

Although chemicals are found in virtually everything in our country, there are still significant scientific gaps in our knowledge regarding many chemicals. That's why, increasingly, the public are demanding that the government provide an assurance about the long term safety of these chemicals.

The Toxic Substances Control Act (TSCA), which was enacted in 1976, gives EPA jurisdiction over chemicals produced and used in the United States. TSCA is the only major

environmental statute that has not been reauthorized. The TSCA Inventory currently contains over 84,000 chemicals, few of which have been studied for their risks to children. Unlike the laws applicable to drugs and pesticides, TSCA does not have a mandatory program where EPA must conduct a review to determine the safety of existing chemicals. In addition, TSCA places legal and procedural requirements on EPA before the Agency can request the generation and submission of health and environmental effects data on existing chemicals.

TSCA was an important step forward at the time. But over the years, not only has TSCA fallen behind the industry it is intended to regulate, it has also proven an inadequate tool for providing the protection against chemical risks that the public rightfully expects.

Mr. Chairman, the bill recently introduced by you and Chairman Waxman represents an important step toward providing greater protection for the health and safety of the American people, particularly our children.

When TSCA was enacted, it grandfathered in, without any evaluation, all chemicals in commerce that existed in 1976. Further compounding this problem, the statute never provided adequate authority for EPA to reevaluate existing chemicals as new concerns arose or science was updated, and failed to grant EPA full and complete authority to compel companies to provide toxicity data. As a result, in the 34 years since TSCA was passed, EPA has only been able to require testing on around 200 of the 84,000 chemicals listed on the TSCA Inventory. To date, only five of these chemicals have been regulated under TSCA's ban authority.

It has also proven difficult in some cases to take action to limit or ban chemicals found to cause unreasonable risks to human health or the environment. Even if EPA has substantial data and wants to protect the public against known risks, the law creates obstacles to quick and effective regulatory action. For example, in 1989, after years of study and nearly

unanimous scientific opinion about the risk, EPA issued a rule phasing out most uses of asbestos in products. Yet, a federal court overturned most of this action because the rule had failed to comply with the requirements of TSCA.

Today, advances in toxicology and analytical chemistry are revealing new pathways of exposure. There are subtle and troubling effects of many chemicals on hormone systems, human reproduction, intellectual development and cognition, particularly in young children. It is clear that in order to properly protect public health and the environment, TSCA must be updated and strengthened, including providing the appropriate tools to protect the American people from exposure to harmful chemicals.

The principles that Administrator announced last September presented Administration goals for updating TSCA that would enable EPA to expeditiously target chemicals of concern and promptly assess and regulate new and existing chemicals.

Let me highlight those principles:

First, chemicals should be reviewed against safety standards that are based on sound science and reflect risk-based criteria protective of human health and the environment.

EPA should have the clear authority to establish safety standards based on risk assessments, while recognizing the need to assess and manage risk in the face of uncertainty.

Second, the responsibility for providing adequate health and safety information should rest on industry. Manufacturers must develop and submit the hazard, use, and exposure data demonstrating that new and existing chemicals are safe. If industry doesn't provide the information, EPA should have the necessary tools to quickly and efficiently require testing, or obtain other information from manufacturers that are relevant to determining the safety of chemicals, without the delays and obstacles currently in place, or excessive claims of confidential business information.

Third, EPA should have clear authority to take risk management actions when chemicals do not meet the safety standard, with flexibility to take into account a range of considerations, including children's health, economic costs, social benefits, and equity concerns. Both EPA and industry must include special consideration for exposures and effects on groups with higher vulnerabilities — particularly children. For example, children ingest chemicals at a higher ratio relative to their body weight than adults, and are more susceptible to long-term damage and developmental problems.

Fourth, EPA should have clear authority to set priorities for conducting safety reviews. In all cases, EPA and chemical producers must act on priority chemicals in a timely manner, with firm deadlines to maintain accountability. This will not only assure prompt protection of health and the environment, but provide business with the certainly that it needs for planning and investment.

Fifth, we must encourage innovation in green chemistry, and support research, education, recognition, and other strategies that will lead us down the road to safer and more sustainable chemicals and processes. All of this must happen with the utmost transparency and concern for the public's right to know.

Finally, implementation of the law should be adequately and consistently funded, in order to meet the goal of assuring the safety of chemicals, and to maintain public confidence that EPA is meeting that goal. To that end, manufacturers of chemicals should support the costs of Agency implementation, including the review of information provided by manufacturers.

Mr. Chairman, the bill recently introduced by you and Chairman Waxman takes a step towards the vision embodied in these principles. This legislation would require that all chemicals be reviewed against a safety standard that appears to be based on sound science and reflects risk-based criteria protective of human health and the environment. It would

squarely place the burden on industry to provide data to demonstrate that chemicals are safe. It would give EPA significantly greater authority to require any data necessary to assess the safety of chemicals and to quickly take action on chemicals which cause harm. The substantial increase in information available on toxic chemicals would vastly improve the understanding of chemical risks and greatly enable government and the public to make better informed decisions about the chemicals that are in the products we use daily. These key elements represent a significant change in the approach the U.S. has historically taken in regulating chemicals, and if enacted, would substantially update and modernize TSCA.

Further, this legislation addresses a number of other areas the Administration believes are important in modernizing this nation's chemicals management efforts, such as encouraging the development and use of green chemistry and adoption of safer alternatives. It would set reasonable limits on confidentiality claims while allowing the sharing of critical data — with appropriate safeguards — with state governments also regulating chemicals. And clear authority is given to assess fees to support the operation of an improved chemicals management program.

Mr. Chairman, your efforts to engage stakeholders have allowed a wide range of parties to raise issues and identify areas where there is agreement as well as matters for further debate. We look forward to working with you and this Committee as you move forward with this important legislation.

The time has come to bring TSCA into the 21<sup>st</sup> Century. I would be happy to answer any questions you may have.

Mr. Rush. The Chair recognizes Dr. Denison for 5 minutes.

#### TESTIMONY OF RICHARD DENISON

Mr. DENISON. Thank you very much. Over the last decade a wide array of concerns has called into question the safety of the thousands of chemicals that we encounter in our everyday lives. Let me just mention a few of these, many more of which are in my written statement. Lead began showing up in a host of children's products finally leading Congress to impose a ban only to have another toxic heavy metal cadmium immediately take its place. PBT chemicals that several members of the Subcommittee have already mentioned this morning that we were told we would never be exposed to are now routinely found in the dust in our homes, in our environment, and even in the bodies of people living in the most remote parts of the globe. EPA cannot tell us with any accuracy how many chemicals are actually in Commerce today. And it is forced to perform Google searches to find out how chemicals like the hormonedisrupting bishpenol A are actually used because it lacks adequate authority to require reporting of chemical production and use. Eighty-five percent of new chemical notices received by EPA have no health data whatsoever because unlike every other developed country in the world, the U.S. lacks a requirement that companies submit a minimum data set when they notify EPA of the new chemical. EPA does require testing occasionally but only in a few percent of cases. These problems, Mr. Chairman can be directly attributed to the failures of The Toxic Substances Control Act. Happily H.R. 5820 would largely or completely ameliorate these problems. It provides a comprehensive systematic solution to a set of problems that we have addressed if at all through a reactive piecemeal approach. H.R. 5820 will help to protect our health and our environment while also encouraging innovation, insuring the use of the best and latest science, and meeting the needs of the market and consumers for better information. Let me touch briefly on

First, it will encourage innovation and protect American jobs. It will allow safer, new chemicals, or those serving critical uses to enter the market without a safety determination and provide ready market access to innovative greener chemicals. It will level the playing field between new and existing chemicals for the first time requiring existing chemicals to meet a safety standard and by raising overall U.S. standards it will help U.S. companies compete in a global economy for customers are demanding safer chemicals and products.

Second, H.R. 5820 will be informed by the latest science. It will spur more effective and efficient testing methods that also reduce cost and the use of animals. It will adopt the same tried and true risk based safety standard that Congress enacted with overwhelming bi-partisan support 14 years ago in the Food Quality Protection Act. And it takes the common sense approach of assessing the aggregate of exposure to different uses of a chemical and to protect the most vulnerable among us. It incorporates the recommendations of the National Academy of Sciences and calls on EPA to frequently update its methods to incorporate the newest and best science. And it calls for expedited reductions in the expo-

sure to PBT chemicals a particularly dangerous class of chemicals that have been targeted by authorities across the globe.

Finally H.R. 5820 will spur the development and access to better information about chemicals vital not only to EPA safety decisions, but also to empower to the market to move toward safer chemicals well in advance of government regulation. It will also directly respond to the growing demand for such information by many American businesses and from consumers. As to workability given the large number of chemicals involved, the legislation reasonably phases in requirements over a number of years. It gives EPA the authority to tailor requirements rather than being one size fits all. It allows EPA to categorically exempt intrinsically safe chemicals, and it allows companies to protect legitimate trade secrets while still allowing EPA to share that information with state governments where needed. Mr. Chairman, I strongly urge the Subcommittee to advance this critically important legislation in this Congress. It represents a once in a generation opportunity to protect American people and our environment from dangerous chemicals. Thank you.

[The prepared statement of Mr. Denison follows:]



### STATEMENT OF

## RICHARD A. DENISON, Ph.D. SENIOR SCIENTIST **ENVIRONMENTAL DEFENSE FUND**

# BEFORE THE U.S HOUSE OF REPRESENTATIVES COMMITTEE ON ENERGY AND COMMERCE SUBCOMMITTEE ON COMMERCE, TRADE, AND CONSUMER PROTECTION

AT A HEARING ON

H.R. 5820, THE TOXIC CHEMICALS SAFETY ACT OF 2010

29 JULY 2010

edf.org

#### THE PROBLEM

Over the past decade, a litany of serious concerns has emerged that calls into question the safety of the thousands of chemicals we use and encounter in our everyday lives:

- Lead has shown up in a host of children's products, imported and domestic, finally leading
   Congress to impose a ban only to see another toxic heavy metal, cadmium, immediately
   take its place, in a most deadly version of the kids' game "whack-a-mole."
- The science of biomonitoring has revealed that virtually all Americans, including newborns, carry in our bodies hundreds of toxic synthetic chemicals, many derived from everyday products only to learn that no one can tell us how they got there or what effects such a mixture of chemicals is having on our and our children's health, because they haven't been adequately tested or assessed for safety.
- Persistent, bioaccumulative and toxic (PBT) chemicals that we were told we would never be
  exposed to such as those used as flame retardants used in furniture and TV casings, in
  stain-resistant coatings on textiles and food packaging, and as plastics additives are now
  routinely detected in the dust in our homes, in our environment, in marine mammals, and
  even in people living in the remotest parts of the globe.
- Our scientific understanding of how chemicals affect our biology has grown dramatically
  over the last decade. We now know that the timing of exposures, especially during early
  development, is critical; that even very low doses of certain chemicals can have adverse
  effects; and that it is the cumulative effects of long-term, real-world exposures to multiple
  chemicals that matter most.
- A large and growing body of scientific evidence<sup>1</sup> is linking chemical exposures to several serious chronic diseases and disorders that are becoming more prevalent, including:
  - leukemia, brain and other childhood cancers, which have increased more than 20% since 1975;
  - o breast cancer, which went up by 40% from 1973 to 1998;
  - asthma, which almost doubled in prevalence from 1980 to 1995;
  - o autism, diagnoses of which have increased 10-fold in the last 15 years; and
  - difficulty in conceiving and maintaining a pregnancy, which affected 40% more women in 2002 than in 1982.
- EPA has had little choice but to resort to pleading with the emerging nanotechnology
  industry to provide, through a voluntary program, the most basic information EPA feels it
  needs to decide how best to regulate these materials only to see a level of participation
  best described as paltry. Such materials can by no means be assumed to be benign; for
  example, one class of nanomaterials multi-walled carbon nanotubes behaves in a
  manner that is ominously similar to asbestos.
- EPA is forced to perform Google searches to try to identify all of the uses of chemicals like
  the hormone-disrupting bisphenol A because it lacks authority to compel reporting of
  chemical uses from all levels of chemical supply chains. And even though people are
  exposed to such chemicals from many different sources, EPA lacks a mandate to assess the
  aggregate risks.

- EPA can't provide even a rough approximation of the actual number of chemicals in commerce today or how and where they are used — because EPA is severely constrained in collecting even the most basic information from companies that make and use chemicals.
   Many companies are not even required to notify EPA when they begin to produce a chemical or use it in a new way.
- 85% of all new chemical notices submitted to EPA have no health data whatsoever, and 95% lack any ecotoxicity data. That's because the U.S. is virtually alone among all developed countries in not requiring a minimum data set to be submitted for new chemicals. While EPA can in theory require subsequent testing, the burdens are so high that it has done so for at most a few percent of new chemicals.
- Residents in low-income communities of color like Mossville, Louisiana (which is surrounded
  by 14 chemical plants) are routinely exposed to deadly chemicals like dioxin, benzene and
  vinyl chloride in amounts that far exceed general population exposures yet such
  disproportionate impacts need not be accounted for when government conducts risk
  assessments on such chemicals, and actions to reduce the exposures are few and far
  between.
- The public, state governments and even workers who may be directly exposed to chemicals
  are denied access to the great majority of chemical information that companies submit to
  EPA. That's because the companies have been given wide latitude to claim it as
  confidential, and EPA lacks resources to review the claims to determine if they are
  legitimate.
  - EPA reviews an average of fourteen 14 out of thousands of such claims made each year.
  - Companies are under no obligation to routinely test their chemicals. If they do happen to obtain data showing a chemical they make presents a substantial risk, they are required to submit it to EPA. Yet when doing so, companies have claimed the identities of nearly half of those chemicals to be confidential despite the fact that Congress ruled such information is ineligible for such protection.
  - More than a quarter of industry submissions claimed information as to whether their chemicals are used in children's products to be confidential.
- Earlier this month, President Obama signed a new law to restrict the use of formaldehyde in plywood and other pressed wood products. In the aftermath of the "toxic trailers" debacle in which hundreds of victims of Hurricane Katrina were exposed to toxic levels of this known human carcinogen, Congress had to step in to address the problem after EPA indicated it lacked authority to do so. Yet this new law limits only one use of one toxic chemical, and it does nothing to halt the ongoing sale and resale of those trailers for use as housing.
  - This sad episode is but one example of how our failure to address chemical risks stymies innovation toward safer chemicals and products: U.S. companies with safer alternatives to this use of formaldehyde have struggled to gain market share against producers of the cheaper, more toxic product.
- Finally and most recently, government has been able to provide few answers to the myriad
  questions and public concerns raised about the nearly 2 million gallons of chemical
  dispersants that have been used in the BP oil disaster in the Gulf of Mexico in large part
  because precious little safety testing has been required. Moreover:

- No toxicity standard applies to the approval process for dispersants; as a result there
  has been no incentive for companies to develop safer, more effective dispersants.
- EPA had to cajole and pressure the dispersant maker for weeks before it finally agreed to identify the ingredients in its dispersants, because EPA lacks adequate authority to compel disclosure.

All of the problems I just described can be attributed, in whole or in part, to the failures of our country's main chemical safety law, the Toxic Substances Control Act (TSCA).

#### THE SOLUTION

Happily, Mr. Chairman, all of these problems would be largely or entirely ameliorated by adoption of the legislation you introduced last week, H.R. 5820, the Toxic Chemicals Safety Act of 2010. It provides the framework for a comprehensive, systematic solution to a set of problems that until now have been addressed, if at all, through reactive, piecemeal actions.

Environmental Defense Fund actively participated, both individually and as a member of the Safer Chemicals, Healthy Families coalition (<a href="www.saferchemicals.org">www.saferchemicals.org</a>), in the intensive 3-month process your Subcommittee and Committee staff convened to actively gather and incorporate feedback on a "discussion draft" of the bill that was introduced in mid-April. Numerous changes were made to the draft by staff to clarify intent and reflect stakeholder concerns raised during that deliberative process.

The result is legislation that reflects the considered input from a wide array of stakeholders – all sectors of business and industry, health groups, environmental justice and community organizations, parent groups, the religious community, animal protection organizations, labor, state regulatory officials, and state and national environmental organizations.

In our view, H.R. 5820 strikes the right balance, by reforming TSCA first and foremost to fully protect human health and the environment (including the most vulnerable among us), while also:

- encouraging and rewarding innovation toward safer chemicals and products;
- informing the chemicals marketplace as well as consumers and the public, while protecting legitimate business-confidential information;
- fully utilizing all available information and new scientific methods so as to reduce costs and minimize the use of laboratory animals in testing chemicals; and
- providing EPA with the resources it needs to efficiently and effectively carry out its expanded responsibilities to ensure chemical safety.

My written testimony provides a more detailed comparison of current TSCA to the Toxic Chemicals Safety Act that describes the many vital reforms the new legislation includes.

Let me highlight a few features of H.R. 5820 that reflect its sound basis in science and its balance:

PROMOTING INNOVATION AND SAFER CHEMICALS: First, the legislation will encourage and reward innovation in the marketplace, protecting American jobs while ensuring public and workplace safety. Three examples:

Far from impeding innovation, H.R. 5820 would allow new chemicals to enter the market without safety determinations if they are intrinsically low hazard, are safer for particular uses than chemicals already on the market, or serve critical uses. This serves to enhance the competitive strength of the American chemical industry by providing ready market access to innovative, safer chemicals.

H.R. S820 will level the playing field between new and existing chemicals, by requiring for the first time that existing chemicals be assessed and shown to be safe in order to remain on the market. By also ensuring the safety of new chemicals before they enter commerce, it will help to position those chemicals – and the companies that innovate them – to satisfy the growing global demand for safer chemicals and chemical products.

And by raising U.S. chemical safety standards to a level comparable to that in other major chemical markets across the globe, H.R. 5820 will help U.S. companies to compete in an economy where customers are demanding more and better information about the chemicals they buy, and more evidence of their safety.

ENSURING USE OF THE BEST AND LATEST SCIENCE: Second, H.R. 5820 ensures the best and latest science is used to inform data requirements and risk-based safety determinations and address chemicals of greatest concern. It promotes development and use of emerging methods for testing chemicals that can enhance our knowledge of chemical effects, while increasing efficiency and minimizing costs and animal use. It calls on EPA to rely on the latest recommendations of the nation's premier scientific body, the National Academy of Sciences, in formulating the risk assessment methodology it will use to support safety determinations. It requires EPA periodically to review data requirements and assessment methodologies and revise them to incorporate the best and latest science.

H.R. 5820 establishes a risk-based safety standard that incorporates the common-sense need to assess the aggregate of exposures to multiple sources of the same chemical, and, where sufficient science supports doing so, cumulative exposures to multiple chemicals that contribute to the same health effect. The standard also reflects the firmly established fact that certain segments of the population have an enhanced vulnerability to the adverse effects of chemicals. This is the same tried-and-true safety standard that Congress enacted into law 14 years ago with overwhelming bipartisan support, and that has served us well in protecting public health from pesticides used on food crops.

H.R. 5820 calls for expedited action to reduce exposures to chemicals identified through application of rigorous scientific criteria as persistent, bioaccumulative and toxic (PBT) chemicals to which people are exposed. This particularly dangerous class of chemicals has been targeted for similar action by authorities across the globe – because they build up in the environment and the food chain, posing health risks long after their initial release. The

legislation also calls for prompt action to address "hot spots," localities where ample scientific evidence demonstrates that people are subject to disproportionately high exposures to toxic chemicals.

MEETING LEGITIMATE INFORMATION NEEDS: Third, H.R. 5820 ensures that more and better information becomes available on all chemicals, not only informing EPA safety decisions, but also responding to the growing market demand for such information from many "downstream" American businesses and from consumers. Chemical producers are required to declare the chemicals they make and their known uses, and to provide a minimum data set to characterize their hazards and exposure potential. Producers are also to provide their commercial customers with information on the chemicals they purchase and use, enhancing chemical users' ability both to make informed decisions and to report to EPA on their own uses of chemicals.

At the same time, given the large number and diversity of chemicals involved, the legislation reasonably phases in the new data requirements over a number of years; gives EPA the authority to tailor data requirements to specific types or groups of chemicals, rather than applying a one-size-fits-all approach; reduces both the costs and use of animals in testing by allowing a range of methods to be used to fulfill data requirements; and allows EPA to categorically exempt intrinsically benign chemicals from information as well as other requirements. It also retains the ability of companies to protect legitimate confidential business information (CBI), while allowing EPA to share CBI with state, local and Tribal governments and ensuring full public access to non-CBI.

Mr. Chairman, I strongly urge the Subcommittee to advance H.R. 5820, the Toxic Chemicals Safety Act of 2010, in this Congress. This critically important legislation represents a once-in-ageneration opportunity to protect the American people and our environment from dangerous chemicals.

Thank you.

<sup>&</sup>lt;sup>1</sup> Summarized in *The Health Case for Reforming the Toxic Substances Control Act*, 2010, available at <a href="http://healthreport.saferchemicals.org/">http://healthreport.saferchemicals.org/</a>.

# Comparison of key policy elements under the

Toxic Substances Control Act and the Toxic Chemicals Safety Act of 2010				
Currently under the Toxic Substances Control Act	Under the Toxic Chemicals Safety Act of 2010			
SAFETY DATA: Few data call-ins are issued, even fewer chemicals are required to be tested and no minimum data set is required even for new chemicals.  BURDEN OF PROOF: EPA is required to prove harm before it can regulate a chemical.  ASSESSMENT OF SAFETY: No mandate exists to assess the safety of existing chemicals. New chemicals undergo a severely time-limited and highly data-constrained review.	Up-front data call-ins for all chemicals would be required. A minimum data set (MDS) on all new and existing chemicals sufficient to determine safety would be required to be developed and made public. Industry would bear the legal burden of proving their chemicals are safe.  Both new and existing chemicals would be subject to safety determinations as a condition of entering or remaining on the market, using the best available science that relies on the advice of the National Academy of			
SCOPE OF ASSESSMENT: Where the rare chemical assessment is undertaken, there is no requirement to assess all sources of exposure to a chemical, or to assess risk to vulnerable populations. No guidance is provided on how to determine whether a chemical presents an "unreasonable risk."	Sciences.  The safety standard would require EPA to account for aggregate and cumulative exposures to all uses and sources of a chemical, and to ensure protection of vulnerable populations that may be especially susceptible to chemical effects (e.g., children, the developing fetus) or subject to disproportionately high exposure (e.g., low-income communities living near contaminated sites or chemical production facilities).			
REGULATORY ACTION: Even chemicals of highest concern, such as asbestos, have not been able to be regulated under TSCA's "unreasonable risk" cost-benefit standard. Instead, assessments often drag on indefinitely without conclusion or decision.	Chemicals would be assessed against a health-based standard, and deadlines for decisions would be specified. EPA would have authority to restrict production and use or place conditions on any stage of the lifecycle of a chemical needed to ensure safety.			
CHEMICALS AND EXPOSURES OF HIGH CONCERN: No criteria are provided for EPA to use to identify and prioritize chemicals or exposures of greatest concern, leaving such decisions to case-by-case judgments.	EPA would develop and apply criteria to identify toxic chemicals that persist and build up in the environment and people (PBTs), and promptly mandate controls to reduce use of and exposure to such chemicals. "Hot spots" where people are subject to disproportionately high exposures would be specifically identified and addressed.			
INFORMATION ACCESS: Companies are free to claim, often without providing any justification, most information they submit to EPA to be confidential business information (CBI), denying access to the public and even to state and local government. EPA is not required to review such claims, and the claims never expire.	All CBI claims would have to be justified up front. EPA would be required to review them, and only approved claims would stand. Approved claims would expire after a period of time. Other levels of government would have access to CBI.			
RULEMAKING REQUIREMENTS: To require testing or take other actions, EPA must promulgate regulations that take many years and resources to develop.	In addition to the MDS requirement, EPA would have authority to issue an order rather than a regulation to require reporting of existing data or additional testing.			

Mr. RUSH. The chair now recognizes our former member of the Congress—I was elected with him in '93. Mr. Dooley is recognized for 5 minutes for the purposes of opening statement. I want to welcome you back to the—this House of Representatives.

### TESTIMONY OF CAL DOOLEY

Mr. DOOLEY. Thank you, Mr. Chairman, I am delighted to be back, and I want to thank you and Congressman Whitman, as well as members of the Subcommittee for inviting me to testify today. Chemical and chemical regulations have a broad impact on the American economy. A sustainable American chemistry industry is critical to American security and economic health, and that is why the American Chemistry Council last year introduced 10 principles around which we believe TSCA modernization can and should be designed. But briefly it is our view that any approach toward updating chemical regulation should insure worker, and consumer, and public safety as its highest priority, preserve the ability of the United States to serve as the innovation industry of the world, to protect the hundreds of thousands of American jobs fueled directly and indirectly by the business of chemistry. Recently I was delighted to hear Speaker Pelosi announce for the balance of this legislative session Democrats would focus on a Make It in America theme. While not always obvious that chemistry, industry, and the industries, and businesses that rely on it at the core of our manufacturing sector, the chemical manufacturing sector alone employs more than 800,000 American workers. 96 percent of all manufactured goods are touched in some way by chemicals. We firmly believe that reforming TSCA to enhance the safety assessment of chemicals while maintaining the ability of the U.S. chemical industry to be the international leader in innovation and manufacturing are not mutually exclusive. However, we must strike the right balance and our assessment of H.R. 5820 as currently drafted promotes unworkable approaches to chemical management. It creates additional burdens that do not contribute to and in fact detract from making advancements in safety while coming up short with respect to promoting innovation and protecting American jobs. In my written testimony I acknowledge that there have been significant improvements over the discussion draft and-but today with my limited time I want to focus on some of the provisions that continue to be a great concern.

First, let me approach—address the safety standard. I am confident that everybody agrees that when someone gets behind the wheel of a car, buys a piece of furniture, or puts on clothing, the chemicals in those products should be safe for their intended use. However the safety standard as established in this bill sets an impossibly high hurdle for all chemicals in commerce that would produce technical, bureaucratic, and commercial barriers that would stifle the manufacturing sector. This—for example the bill requires that aggregate exposure to a chemical or a mixture meets the reasonable certainty of no harm. This means that when a chemical or mixture is listed for a safety determination, the manufacturer carries the burden of showing with reasonable certainty not just that the chemicals used, or the chemical poses no harm, but that all other aggregate exposures from all other uses of that

chemical pose no harm. Even more troubling are the provisions in the bill that would identify chemicals that would be subject to a safety determination. The bill identifies 19 specific chemicals and requires within 12 months that the Administrator of EPA develop and maintain a list of 300 chemicals that would be subject to a safety determination. I don't have a clue, you know, what the rationale was to identify 300 chemicals, but I do know that there are significant real world consequences resulting from a chemical being listed. Again the legislation requires that the manufacturer bear the burden of proof. As an industry, we are prepared to accept a greater responsibility to ensuring that we provide the date that meets an appropriate safety standard, but what is troubling is that there is no requirement that EPA evaluates the information we submit and render a safety determination during a specific time frame. Furthermore, under the bill if the EPA does not issue a safety determination for whatever reason, it would prohibit any new use of the chemical. Now you don't have to be a rocket scientist or a chemical engineer to understand the impact that this policy will have on innovation and product development in the United States. Regardless of the environmental, the economic, or the societal benefits, and attributes of a product if this contains one of the 300 chemicals listed it would be shut out of the market for reasons that have nothing to do with the risk of that product and the exposure that it would present to consumers or the environment. And it shouldn't be lost on any of you that this legislation would require every chemical and mixture that is in Congress to eventually be subject to this safety determination. You know when you think about the impacts that this has, I mean, they are so dramatic because you can have—this is a piece of polysilicon. This is a very common chemical that has an additive that goes into solar panels that you see here, it is in the, you know, the blackberrys, and the cell phones we use. It is in the computers that we use every day. If perhaps one of these chemicals that are in all these products was in fact on that safety determination, that list of 300, and the Administrator of EPA didn't take action in a timely manner and issue a determination, it would ban any new use of this polysilicon on any new application regardless of the actual exposure and the increased risk that would emanate or result from that product. Clearly this is something that runs contrary to the interest of providing and insuring the United States maintains at the forefront of innovation. We also have serious concerns about the new chemicals provisions, we have serious concerns as well about the import provisions which we acknowledge that there was a good faith effort to try to maintain a level playing field and I hope that we have the opportunity to address some of those during our question and answer period.

[The prepared statement of Cal Dooley follows:]



Testimony of The Honorable Cal Dooley President and CEO American Chemistry Council 1300 Wilson Blvd. Arlington, VA 22209

Before the

Subcommittee on Commerce, Trade and Consumer Protection of the House Committee on Energy and Commerce

> "H.R. 5820 - The Toxic Chemicals Safety Act of 2010" July 29, 2010

Mr. Chairman, Congressman Whitfield, members of the Subcommittee – thank you very much for inviting me to testify today. As everyone on this committee knows, the American Chemistry Council is a strong advocate of reform of the Toxic Substances Control Act.

Chemicals and chemical regulation have a broad impact on the American economy. A sustainable American chemistry industry is critical to American security and economic health.

This is why we introduced ten principles around which we believe TSCA modernization can and should be designed. Put briefly, it is our view that any approach toward updating chemical regulation should

- Ensure worker, consumer and public safety as its highest priority;
- Preserve the ability of the United States to serve as the innovation engine for the world; and
- Protect the hundreds of thousands of American jobs fueled directly and indirectly by the business of chemistry.

Recently, we were delighted to hear Speaker Pelosi announce that for the balance of this legislative session Democrats would focus on a "Make it in America" theme. While not always obvious, the chemistry industry and the industries and businesses that rely on it are at the core of our manufacturing sector. For example, the chemical manufacturing sector alone employs more than 800,000 American workers. And, 96% of all manufactured goods are touched in some way by chemistry.

First and foremost, our industry is committed to ensuring our chemicals are safe for their intended use. And we firmly believe that reforming TSCA to enhance the safety assessment of chemicals while maintaining the ability of the U.S. chemical industry to be the international leader in innovation and manufacturing are not mutually exclusive.

However, we must strike the right balance and our assessment of H.R. 5208 as currently drafted promotes unworkable approaches to chemicals management.

It creates additional burdens that do not contribute to and, in fact, detract from making advances in safety, while coming up short with respect to promoting innovation and protecting American jobs.

I greatly appreciate the task you have undertaken. I also greatly appreciate your willingness to listen to our ideas both during the stakeholder process and today at this hearing. My simple request is that we recognize that chemicals management is an extremely complex undertaking that affects the entire American economy and there is much more work that needs to be done.

As to HR 5820, I want to first acknowledge that the bill, as filed, attempts to address some concerns that ACC and others had with the original discussion draft.

For example, the legislation makes it explicit that safety determinations should focus on "intended uses" for chemicals (though there are troubling uncertainties as to how this would be applied under the safety standard as presented in the bill).

It now mandates that EPA develop tiered and varied approaches to gather the data that would be required on chemicals – in keeping with the principles of sound science.

The bill also allows for the renewal of confidential business information claims (although, again, troubling concerns remain).

Despite some improvements, there are still significant fundamental issues in the legislation that undermine its workability.

In modernizing TSCA we need to take stock of the shortcomings we are trying to improve and build on what currently works. Most stakeholders have pointed to the lack of a systematic look back at the grandfathered chemicals in the current program as an area that needs to be addressed – and we agree.

They have also suggested that current TSCA can make it difficult for EPA to get the information it needs and take appropriate actions due to burdensome requirements – and we agree with that as well. But it is important to note that many believe the new chemicals program under current law is working quite well.

There are many aspects of HR5820 that we feel need to be addressed. Today, I'd like to highlight three: the safety standard, the regulation of new chemicals and the regulation of products imported into the United States.

# **SAFETY STANDARD**

I am confident everyone agrees that when someone gets behind the wheel of a car, buys a piece of furniture or puts on clothing, the chemicals in those products should be safe for their intended use.

However, the safety standard as established in this bill sets such an impossibly high hurdle for all chemicals in commerce that it would produce technical, bureaucratic and commercial barriers so significant they would be the law's undoing.

For example, the bill requires that "aggregate exposure" to a chemical or a mixture meets the "reasonable certainty of no harm" standard.

This means that when a chemical or mixture is listed for a safety determination, the manufacturer(s) carries the burden of showing with reasonable certainty not just that the company's use of the chemical and any resulting exposures from those uses pose no harm, but that all other aggregated exposures from all other uses of the chemical pose no harm. It is not clear to us how any company could actually do that.

TSCA regulates thousands of chemicals, many with hundreds of uses. TSCA chemicals have industrial applications and consumer product applications. I am not sure how industry or the EPA would be able to gather enough information to meet this aggregate exposure standard for each and every chemical.

In addition to aggregate exposure, HR 5820 also requires EPA to consider the "cumulative effects of exposure to chemical substances or mixtures in making its safety determination."

The term "cumulative effects" is undefined and at present there is neither sufficient data nor a sufficient process in science to conduct a proper analysis of cumulative risk.

The bill also directs EPA to incorporate recommendations from a recent National Academy of Sciences report called "Science and Decisions,"

which includes some that are quite useful, but others that remain very controversial and are not based on the best available science.

The result of these and other aspects of the safety standard as currently articulated in HR 5820 would be tremendous uncertainty and a bureaucratic stalemate, which would result in less innovation, and job losses rather than job creation. The combined effect would place a serious drag on an already sputtering economy.

## **NEW CHEMICALS**

With respect to new chemicals, many have commented that EPA's current process is the most effective part of existing chemical management regulations.

But the new approach in HR5820 – such as its overly-broad definition of adverse effects and the amount of upfront data required before a new chemical can be put on the market - will effectively discourage the introduction of new chemicals, including new greener chemicals, into commerce in the United States.

If EPA cannot render a timely decision – and doing so may prove to be an overwhelming task-- new chemicals would essentially be barred from the U.S. market.. Even a better resourced EPA will struggle to make these new chemicals decisions while simultaneously evaluating existing chemicals, receiving and managing thousands of minimum data sets and making routine declarations of new uses of existing chemicals. Timely action is almost unimaginable.

Our customers won't stop asking for new chemistries because EPA is unable to act. The result will be that this innovation moves to other countries with more manageable regulatory regimes — and the production of these new chemistries will move with it. We would export innovation and jobs instead of products. Moreover, EPA will now have a full year to approve a new chemical, which is considerably longer than the 90-day period now afforded the agency. The extended time cycle just doesn't work with the realities of the marketplace.

There are better ways to do this – such as requiring additional data as a new chemical's volume increases or as its use patterns undergo significant change.

Related to new chemicals is the provision that provides incentives for development of what are defined as "safer" alternatives. On the surface this sounds appealing but the approach suggested in the bill is problematic.

If a chemical meets the safety standard, it is, by definition, safe for its intended uses. Under the safer alternatives provision, EPA is forced to engage in the impossible and inappropriate task of picking winners and losers among a class of chemicals, all of which have already been deemed to be safe.

By way of example, is a chemical that has a higher flammability but lower acute toxicity a "safer" chemical? Who is best equipped to make that determination?

Just as troublesome is a provision casting doubt over the future of the existing polymer exemption even though in 1995 EPA reviewed the safety of polymers and concluded that this exemption was appropriate. This provision would create serious uncertainty over the future of a major economic engine in our industry.

Innovations in polymer chemistry are creating jobs and providing energy savings by light-weighting vehicles, by creating the products that harness wind and solar energy, and by making appliances, homes and commercial buildings more energy efficient. It would be a giant step backwards to drive the development of these products and the jobs they create off our shores.

# IMPORTERS OF ARTICLES

In the discussion draft, one of our greatest concerns was that it created an expensive and time-consuming regulatory burden that would put U.S. manufacturers at a competitive disadvantage to our international competitors. It unintentionally created a double standard by permitting overseas manufacturers the freedom to avoid most of the regulations that would be imposed on domestic manufacturers.

In response to this concern, H.R. 5820 puts the burden of compliance on the retailer and other importers in a manner that is unworkable, unenforceable and not compliant with international trade laws.

For example, a company importing products from China may be required to certify that that the Chinese exporter has conducted a full assessment of the aggregate exposure risk of that product in the United States,.

While we agree that you need to avoid double standards, we're entering into an area of extraordinary complexity that must be thoroughly evaluated. We do not believe the proposed approach is workable, and this, again, reflects the magnitude of the challenge before Congress in addressing chemicals management.

### **CONCLUSION**

For TSCA modernization to succeed, consumers, industry, investors and government alike need a system that is sound, fair and provides a high degree of certainty. Regulatory certainty and workability are critical to the success of U.S. businesses. National uniformity, rather than a patchwork of state laws, is also important.

We must recognize that this is an issue of great national significance. It needs to be addressed in a manner that recognizes its complexity, takes into account what we've learned from TSCA and other regulatory programs and sets up the EPA for success. Reforming TSCA the right way ensures we will "Make it in America."

Modernization of TSCA must also be done in a way that allows the United States to maintain its preeminent role as the country that innovates, the country that makes things and the country that provides jobs and economic security to its people.

HR 5820 includes some improvements over the discussion draft circulated to this committee in the spring, but its foundation is still unworkable. There is clearly significant work that remains to be done.

To that end, the American Chemistry Council and its members are committed to continuing to work with this committee and with other stakeholders to modernize the law in a meaningful and effective way.

We firmly believe that you can develop legislation that ensures safety while promoting innovation and protecting jobs.

Thank you again for this opportunity, I look forward to your questions.

Mr. Rush. The Chair now recognizes Mr. Cook for 5 minutes.

#### TESTIMONY OF KEN COOK

Mr. COOK. Mr. Chairman, thanks for the opportunity to testify today, and Mr. Whitfield, and other members of the Committee. When it comes—oh I am sorry—when it comes to protecting the public from toxic—

Mr. Rush. Pull the mic closer to you please.

Mr. Cook. When it comes to protecting—you still can't hear?

Mr. Rush. No, turn it on, yes.

Mr. Cook. It wasn't—it says it is on. All right, sorry. I guess it is—technological breakdown—should I try the other mic? I am about halfway through my testimony already.

Mr. DOOLEY. So far my plan is working.

Mr. Cook. Cal says his plan is working. When it comes to protecting the public health from toxic industrial chemicals Mr. Chairman, The Toxic Substances Control Act has been so ineffective for so long a lot of people forgot it was on the books or didn't even know it was. It was the one environmental law according to their own internal documents that the industry was actually satisfied with, liked, because unlike the Clean Air Act or the Clean Water Act, or other statutes, TSCA really didn't interfere with their business very much at all. And when the EPA did try and use The Toxic Substances Control Act under the first President Bush to ban a notorious stone cold killer, asbestos, the law itself defeated the agency.

Now this law is defeating the chemical industry. Because TSCA leaves the government so stunningly unable and powerless to deal with this soup of toxic industrial chemicals that are in the environment, that are in all of us, the American public has lost confidence, has lost trust that the products they are using, the chemicals they are exposed to are safe. Now the chemical industry wants a strong law behind it instead of a weak law underfoot. Within the environmental community TSCA was the crazy aunt in the attic that no one talked about and wanted to forget with one exception, the Environmental Defense Fund which to its great credit maintained a focus on this statute when most of the rest of us were not paying attention.

Mr. Chairman, you, Mr. Waxman, your co-sponsors and the extraordinary staff that has put so much work into this, you have changed all of that. With the introduction of this bill which when it becomes law will be the strongest public health environmental statute in the world. There is not a person in this room, not a one, not a person in this country, not a one who does not now have in their body, in their blood dozens, if not hundreds of TSCA regulated chemicals that are known to cause cancer in laboratory animals or in people—known. How many carcinogens? We don't know. Nearly a century into the chemical revolution no one, not government, not my friends in industry has bothered to look. As the President's cancer panel reported earlier this year we are largely left to speculate if those chemicals alone or in combination are contributing to cancer and how much they may be contributing. What that landmark panel's report did say is that we have grossly under-

estimated the role these chemicals have played in the surge of cancer.

Here is what is not speculation, Mr. Chairman. Half of all the men in this country, a third or all women will one day hear a doctor say to them you have cancer. I have nothing to tell you, Mr. Chairman about those moments. It has gripped my family, my loved ones, as it has the families of everyone in this room. What could be worse? Let me tell you. Every baby born in this country today for decades past has come into the world pre-polluted with a load of toxic carcinogenic chemicals, pre-polluted with a load of chemicals that threaten the intricate wiring of their delicate rapidly developing brains; pre-polluted with a mix of chemicals that upset their exquisitely sensitive hormone systems that will regulate their bodies for the rest of their lives and many more chemicals circulate through that 300 quarts of blood while they are in the womb that can affect virtually every organ system in their body. Pollution from the industrial chemicals that you see to regulate with this landmark legislation begins in the womb. We know this because my colleagues have done the studies, the pioneering studies that documented it.

Mr. Chairman, I have to commend you for this legislation. It is far reaching. I believe it is fair. I want to talk very briefly about three points. We believe strongly that the standard reasonable certainty of no harm borrowed very usefully from the pesticide law that has helped our companies lead the world in that marketplace is vital. Two, we believe very strongly that biomonitoring should be at the center of this bill more so than it is now. We would encourage you to look back at the kid safe chemicals act because our more than 100,000 supporters who signed a petition to this committee, almost a million supporters in total, they want to know what chemicals are in the blood of babies in the womb. And they want to know, if those chemicals are in there, are they safe? We expect the government to be able to do that.

One final point, Mr. Chairman, I think you have struck the right balance on confidential business information, the right balance in addition on most of the other provisions in the bill that would encourage the government to divulge more information obtained from the industry. They do bear the burden to demonstrate that their chemicals are safe in commerce. Thank you.

[The prepared statement of Mr. Cook follows:]



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#### Testimony of Kenneth A. Cook

# President Environmental Working Group

#### Before the

# SUBCOMMITTEE ON COMMERCE, TRADE AND CONSUMER PROTECTION U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON ENERGY AND COMMERCE

On

"H.R. 5820, the Toxic Chemicals Safety Act of 2010"

Thursday, July 29, 2010

Mr. Chairman and distinguished members of the subcommittee: My name is Kenneth A. Cook. I am the President and Co-Founder of Environmental Working Group (EWG), a nonprofit research and advocacy organization based in Washington, DC, with offices in Ames, Iowa, and Oakland, California. Thank you for holding this important hearing and for offering me the opportunity to testify.

I want to thank you, Chairmen Rush and Waxman, for your leadership in initiating this long overdue policy debate over how to reform the Toxic Substances Control Act of 1976 (TSCA). Your bill, H.R. 5820, the Toxic Chemicals Safety Act of 2010, is essential to fixing our broken toxic chemicals policy. We applaud you and your staff for conducting an extensive stakeholder process with numerous groups, including our colleagues in the environmental community, organized labor, health-affected groups, healthcare providers, the chemical industry, the consumer products industry and other interested parties. The strong foundation you have laid will build broad, deep support for this landmark legislation. EWG staff have met with every office represented on this committee to discuss the urgent need to reform TSCA.

Modern science has transformed the debate over toxic chemicals policy and underscored the need for H.R. 5820. In 2005, a biomonitoring study commissioned by EWG found more than 200 synthetic industrial chemicals in the umbilical cord blood of 10 newborn infants (EWG 2005a). We discovered that even before they were born, these 10 children had been exposed to a long list of dangerous chemicals, including dioxins and furans, flame retardants, and active ingredients in stain removers and carpet protectors. We also found lead, polychlorinated biphenyls (PCBs) and pesticides banned more than 30 years ago. Last year, in tests of cord blood samples from 10 more newborns, we found comparable unsettling results, including bisphenol A (BPA), a synthetic estrogen that disrupts the endocrine system, and perchlorate, a rocket fuel component and thyroid toxin that can alter brain development (EWG 2009a). The second group of children we tested happened to be of African American, Asian-Pacific and Latino heritage, but their body burdens were very much like the first group, whose ethnic and racial identities are unknown. What this means is that all of us are united by an inescapable and profoundly disturbing reality: toxic chemical pollution begins in the womb.

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EWG and Centers for Disease Control and Prevention surveys of the scientific literature have found very few tests of umbilical cord blood for industrial chemicals. The few studies that exist have found up to 358 chemicals in cord blood from American newborns (Attachment A). More comprehensive testing would very likely find many more chemicals polluting the bodies of Americans, young and old. Since 1976, when President Ford signed the Toxic Substances Control Act into law, chemical manufacturers have registered for use more than 80,000 chemicals. More than 15,000 chemicals have been manufactured or imported in medium-to-high amounts over the past 25 years. Biomonitoring tests of all Americans have involved less than one percent of those compounds. Over the past 15 years, EWG has tested more than 200 people for 540 chemicals and found up to 482 of them. The more chemicals we test for, the more we find. Meanwhile research on chemicals that are biologically active in extremely small amounts has exploded (Attachment B). The substantial public health costs associated with toxic exposures, ranging in the tens of billions of dollars, continue to rise (Attachment C).

In April 2010, the President's Cancer Panel concluded that "to a disturbing extent, babies are being born pre-polluted." It declared that the number of cancers caused by toxic chemicals is "grossly underestimated" and warned that Americans face "grievous harm" from largely unregulated chemicals that contaminate air, water and food (President's Cancer Panel 2010).

As modern science has demonstrated, we must reform federal law through H.R. 5820 to ensure that new chemicals are safe for kids, our most vulnerable population, before they are allowed to go on the market. Each day brings another jarring headline as new research documents the health dangers of toxic chemicals. The need for H.R. 5820 has never been more urgent.

Voices from across the political spectrum are calling on Congress to reform, modernize or overhaul this failed law. The American Chemistry Council's principles to modernize TSCA and the Safer Chemicals, Healthy Families Coalition's principles of reform provide excellent frameworks for engagement, debate and consensus building. EWG's principles for reform are embodied in the Kid-Safe Chemicals Acts of the previous two Congresses, many elements of which remain in H.R. 5820. We have strongly supported those principles since "Kid-Safe" was first introduced five years ago.

Reasonable Certainty of No Harm. We applaud H.R. 5820's risk-based approach to regulation, and we support expedited risk assessments and actions on persistent, bioaccumulative toxins as set forth in Section 32. (EWG Testimony 2010). We strongly support Section 6's explicit language that would squarely place the burden of proof on industry to show that its products are safe for public health and vulnerable populations. We believe that the "reasonable certainty of no harm" safety standard in Section 6 of H.R. 5820, language similar to that of the well-regarded Food Quality Protection Act of 1996, should replace TSCA's futile "unreasonable risk of significant injury to health or the environment" regime. A "reasonable certainty of no harm" standard would require the Environmental Protection Agency (EPA) to consider aggregate exposures and all exposure routes, again, a principle usefully borrowed from FQPA. H.R. 5820 requires that both existing and new chemicals must meet this safety standard, a needed clarification from the discussion draft. We applaud the requirement to make public safety determinations.

Minimum Data Set. Section 4 outlines key data sets that manufacturers would be required to give the EPA, including chemical identity, substance characteristics, biological and environmental fate and transport; toxicological properties; volume manufactured, processed, or imported intended uses, and

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exposures from all stages of the chemical substance or mixture's lifecycle that are known or reasonably foreseeable. We support the language that provides for tiered testing and data sharing to reduce costs and minimize animal testing. It is essential to an effective toxics policy that EPA have clear authority to require additional testing and ask for any study needed to better understand the risks of any chemical. We would like to see clear requirements that industry disclose chemical dossiers prepared for: the European toxics regulatory framework Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH); EPA's voluntary High Production Volume challenge program; internal uses; data from other government agencies, such as the Food and Drug Administration; the National Children's Study; EPA's TOXCAST and other high-throughput screening batteries. Lack of data must never again be an obstacle to protecting public health. Section 4 of H.R. 5820 puts us on the track to accomplishing that goal.

**Prioritization & Biomonitoring.** Detection of a chemical in umbilical cord blood does not prove that it will cause harm. As researchers have mapped more and more of what we have dubbed the "human toxome," however, scientists, public health experts and policymakers have embraced biomonitoring as the logical foundation for regulation of industrial chemicals. The Kid-Safe Chemicals Act, H.R. 6100, as introduced in the 110<sup>th</sup> Congress, would have prioritized safety assessments by focusing first on the chemicals that show up in people. The measure would have required phasing out production and use of chemicals found in human umbilical cord blood unless rigorous testing showed these substances to be

EWG's nearly one million supporters, the vast majority of whom are parents, and the more than 111,000 citizens who signed our Kid Safe Chemicals petition will be disappointed that H.R.5820 will not ensure that the government has determined what industrial toxic chemicals pollute babies in the womb, or that the government will not ensure the safety of chemicals that are "pre-polluting" babies. The text of our petition reads as follows:

Babies are born pre-polluted with 100's of toxic chemicals, our broken toxics law is failing them, we need your help to change that, EWG tested the umbilical cord blood of 10 newborn babies and found nearly 300 chemicals, including BPA, fire retardants, lead, polychlorinated biphenyls (PCBs) and pesticides that were banned more than 30 years ago. Speak up for change. Our kids deserve it. Bills to overhaul federal toxic chemicals policies are now moving through Congress. They would require that all chemicals be proven safe for children before they can be sold. Lawmakers in Washington need to know that you want strong reforms for our broken toxics law. Please sign this petition to demand that Congress take action to make chemicals in consumer products kid-safe.

We believe that much of the tremendous momentum for public support of toxic chemicals policy reform is driven by concern for children's health.

H.R. 5820's vague language that a chemical's presence "in biological media" would be one of many factors considered when EPA moved to put a chemical on the priority list. Left unmodified, this approach appears to give equal weight to chemicals found in snails, fish or people. It is our view that industrial chemicals that cross the placenta to contaminate a developing child should be placed at the top of EPA's to-do list. Few factors translate to greater risk to health. Therefore, we will work with the

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committee to try to strengthen the priority criteria so that we can assure parents that the reform effort will truly protect children from toxic exposures in the womb.

Section 33, on Children's Environmental Health, allows for biomonitoring research of infants and pregnant women if EPA deems the presence of the chemical in "biological media" to be "above that normally found" in pre-polluted babies – in other words, more than "normal" contamination. Fact is, Americans do not and should not accept any contamination of infants in the womb as "normal." We would like to see this language strengthened. We strongly support this section's public disclosure requirements of biomonitoring data.

We commend the committee for placing the 19 chemicals listed in Section 6 on the priority list. Over the last 15 years, EWG, along with our colleagues in the environmental community, has conducted research on many of these priority chemicals. In 2007, for example, a landmark study by EWG found BPA in 57 percent of canned food samples tested. Last year, for the first time in U.S. infants, EWG detected BPA in 9 of 10 umbilical cord blood samples. This month, EWG reported finding high levels of BPA in 40 percent of receipts from major U.S. businesses and services. In 2001 and 2003, EWG issued reports on perchlorate contamination of tap water and groundwater in California and other states and on high levels of this thyroid toxin in lettuce samples and cow's milk. EWG's analysis has found millions of American women of childbearing age at risk of abnormal thyroid hormone levels during pregnancy. In 2008, EWG reported detecting phthalates in adolescent girls. In March 2009, laboratory tests by EWG and the Campaign for Safe Cosmetics found that 23 out of 28 children's personal care products were contaminated with formaldehyde, a probable carcinogen (Attachment D). Given the weight of scientific evidence on the health effects of these 19 chemicals, we agree they should be on the priority list.

We were surprised that asbestos was omitted from the priority list. Given the longstanding scientific evidence of the dangers of asbestos and the Bush EPA's unsuccessful efforts to ban it in the 1980s, this legislation must expedite a rapid phase out of this dangerous substance.

Reporting Requirements. We support Section 8's requirements to provide EPA with critical data on chemical use, manufacturer, potential worker exposures and facilities, and relevant health and safety data studies. The public inventory and online database requirements promote transparency and accountability. Most Americans would probably be shocked that these data requirements have not long been in place.

"Hot Spots" and Fenceline Communities. We are pleased to see that this legislation tackles the myriad issues facing communities disproportionately affected by industrial pollution. EWG's 2009 report, "Pollution in 5 Extraordinary Women: The Body Burden of Environmental Justice Leaders," documented up to 48 chemicals in the blood of five prominent women environmental justice leaders. The women, from New Orleans, Corpus Christi, Oakland and Green Bay are working to rid their communities of pollution from local manufacturing plants, hazardous waste dumps and oil refineries. Every woman was contaminated with flame retardants, Teflon chemicals, synthetic fragrances, BPA and perchlorate (EWG 2009e). This legislation's "hot spot" list and action plan would help EPA focus resources on the many communities that suffer disproportionate exposure to chemicals. We would like to see this provision toughened to ensure that emissions from "TSCA-regulated" chemicals are explicitly pegged for virtual elimination in the action plans. The bill should also spell out penalties if EPA, a state, or a locality does not fully implement an action plan or fails to meet the reduction targets. We thank the

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committee for acknowledging the need to focus on these communities. We look forward to working with you to ensure that the section will fully address the issue of disproportionate exposure.

Confidential Business Information (CBI). Section 14 of H.R. 5820 reflects a major step forward in creating more transparency and curbing industry abuses of CBI. The Government Accountability Office has testified that about 95 percent of new chemical applications contain confidentiality claims. (GAO 2009). EWG has found that industry has made CBI claims for the identities of 13,596 chemicals produced since 1976 – nearly two-thirds of the 20,403 chemicals added to commerce in the past 34 years. A significant number of these secret chemicals are used in everyday consumer products, including artists' supplies, plastic products, fabrics and apparel, furniture and children's items. EPA data show that at least 10 of the 151 high volume confidential chemicals produced or imported in amounts greater than 300,000 pounds a year are used in products specifically intended for children (EWG 2010a). Last fall, EPA released the chemical identity of 530 high production volume chemicals because that information was already publicly available.

The overbroad secrecy provisions in current law threaten public health. Under section 8(e) of TSCA, companies must turn over all data showing that a chemical may present a substantial risk of injury to health or the environment. By definition, these are the chemicals of the greatest health concern. In the first eight months of 2009, industry concealed the identity of the chemicals in more than half the studies submitted under 8(e). Independent researchers and the public simply do not know how many of those chemicals are present in our bodies and in newborns.

H.R. 5820 proposes a crucial improvement by prohibiting the secrecy of chemical identity in health and safety study submissions. It would ensure that chemical identity and health and safety data would be publicly available and that the EPA could share important information with other federal agencies and state and local governments. The legislation would require that manufacturers justify confidentiality. EPA could deny that claim. These provisions would end the spurious confidentiality claims that have plagued TSCA but would permit some information to remain confidential. We are pleased to see that there is a sunset of 5 years on confidential information. Even the Central Intelligence Agency (CIA) and the National Security Administration (NSA) release confidential information every few years — why not EPA?

Safer Alternatives & Green Chemistry. We generally support the "safer alternatives" language outlined in section 35 of H.R. 5820, especially the requirement that they pass the "reasonable certainty of no harm" safety standard and submit a minimum data set for these alternatives. All too often consumers find that a bad actor chemical is replaced with an alternative, the identity and safety of which are uncertain.

Exemption for Intrinsic Properties of Chemicals. Section 39 provides EPA broad discretion to exempt certain chemical substances or mixtures from the minimum data set, the safety standard and reporting processes. While we understand the need for chemicals to go to the market and a smart prioritization process, the "intrinsic properties" language of this provision could be abused. We look forward to working with the committee on options for dealing with this concern.

EPA Oversight Authority. We applied Section 11, which would expand the authority for EPA to conduct inspections and issue subpoenas to chemical facilities. Consumers have lost confidence in many products as a result of EPA's terribly weak oversight authority. This section would help restore the

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public's confidence in our regulatory framework. Sections 16 and 17 would provide EPA with needed authority to impose penalties for violations, criminal penalties for knowing endangerment, and would clarify that EPA has the authority to authorize compliance with any rule or order issued under the Act. Section 40 would ensure that the bill applies to federal agencies that manufacture or produce chemical substances or mixtures. These sections are critical measures to ensure a vibrant regulatory toxics policy.

#### RECOMMENDATIONS

In conclusion, we commend the committee for its commitment to TSCA reform. We support H.R. 5820 and the steps Chairmen Rush and Waxman have taken to ensure a strong safety standard, mandate stronger EPA authority to put the burden on industry to show a chemical is safe before it goes on the market promote prioritization, require a minimum data set and address abuses of confidential business information claims. To protect our children's health, however, the federal government must place a greater emphasis on biomonitoring of cord blood. EWG applauds the committee for its dedicated work on toxic chemicals policy reform. We look forward to working with you to urge Congress to take quick action to establish a national policy on chemicals based on the newest and best science. Thank you for your time. I welcome the opportunity to answer any questions you may have.

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# Attachments

ATTACHMENT A: Results of Select Cord Blood Biomonitoring Studies of American Infants

ATTACHMENT B: Studies show everyday chemical exposures are linked to serious adverse

health effects

ATTACHMENT C: Public Health Costs of Toxic Exposures

ATTACHMENT D: Overview of EWG's Research on Priority Chemicals in Section 6

References

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# ATTACHMENT A: RESULTS OF SELECT CORD BLOOD BIOMONITORING STUDIES OF AMERICAN INFANTS

Nationally, cord blood biomonitoring studies have detected up to 358 chemicals

Chemical class	Chemical subclass	Summary of representative study	No of newborns forted	Place of birth	No. of Chemical Clauded
Dioxin & Furan	Brominated dioxin	EWG tested cord blood from 10 newborns for 12 brominated dioxins and furans and found at least one of these chemicals in 7. In the 7 newborns, 6 to 7 different congeners were found. Mean total level was 12 pg/g lipids in blood serum. (EWG 2005)	10	U.S. hospitals	6-7
Dioxin & Furan	Brominated dioxin	EWG tested cord blood from 10 newborns of minority background for 12 brominated dioxins and furans and found at least one in 4 of the subjects, Six different congeners were found. Mean total level was 10.7 pg/g lipids in blood serum. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif.	6
Dioxin & Furan	Chlorinated diexin	Researchers from the SUNY Health Science Center tested cord blood from 5 babies delivered via C-section from late 1995 to early 1996 for dioxins, dibenzofurans, and coplanar PCBs. Mean measured levels of total PCDDs, PCDFs, and coplanar PCBs were 165 pg/g for cord blood. (EWG 2005)	5	N.Y.	and the state of t
Dioxin & Furan	Chlorinated furan	EWG tested cord blood from 10 newborns for 17 chlorinated dioxins and furans and found at least one in all 10 subjects. Eleven different congeners were found. Mean total level was 56.3 pg/g lipids in blood serum. (EWG 2005)	10	U.S. hospitals	9 9 0
Dioxin & Furan	Chlorinated furan	EWG tested cord blood from 10 newborns of minority background for 17 chlorinated dioxins and furans and found at least one in all 10 subjects. Fifteen (15) different congeners were found. Mean total level was 59.7 pg/g lipids in blood serum. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif.	2
Fire Refardant	Brominated Fire Retardant	EWG measured TBBPA levels in cord blood from 10 newborns of minority background. TBBPA was found in 3 samples with a mean level of 11 ng/g lipids in blood serum. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif.	e de la constanta de la consta
Metal	Cadmium	Researchers from Harvard measured cord blood concentrations of cadmium in 94 healthy babies, finding concentrations ranging from 0.003 to 0.210 ug/dl, with mean of 0.045 ug/dl. (Rabinowith 1984)	94	Boston, Mass.	900
Metal	Lead	Researchers from SUNY Oswego, the New York State Department of Health, the University of Albany, and Penn State University measured cord blood lead levels in 154 children and correlated lead levels with adrenocortical responses to acute stress in children. They divided cord blood levels into the following 4 quartiles: < 1.0 (1st quartile; n = 37), 1.1–1.4 / p/dL (2nd quartile; n = 39), 1.5–	154	N.Y.	P P P P P P P P P P P P P P P P P P P

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Chemical class	Chemical subclass	Summary of representative study  1.9 2g/dL (3rd quartile; n = 36), and 2.0–6.3	No. of newborns tested	Place of birth	Chemical Chund
		?g/dL (4th quartile; n = 42). (Gump 2008)			
Metal	Lead	Researchers from Harvard University, Emory University, and University of Massachusetts at Amherst tested lead levels in cord blood from 527 babies born between 1993 and 1998 and found mean levels of 1.45 ug/dL. (Sagiv 2008)	527	New Bedford, Mass.	T.
Metal	Mercury	Researchers from Columbia University and the CDC tested for cord blood levels of mercury in women who live and or work close to the World Trade Center site between Dec. 2001 and June 2002. The researchers found a mean cord mercury level of 7.82 ug/L. (Lederman 2008)	289	New York City, N.Y.	***
Musik	Musk	EWG measured nitro and polycyclic musk levels in cord blood from 10 newborns of minority background. Galtoxolide was found in 6 samples at a mean level of 0.483 ng/g, and tonalide was found in 4 samples at a mean level of 0.147 ng/g. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif.	2
РАН	Polyaromatic hydrocarbons (PAHs)	Researchers from Columbia University measured levels of benzoA-pyrene DNA adduct levels in 203 babies from New York City mothers who were pregnant during 9/11. (Perera 2005)	203	New York City, N.Y.	Per s
PAH	Polyaromatic hydrocarbons (PAHs)	EWG tested cord blood from 5 newborns for 18 polyaromatic hydrocarbons and found at least one in all 5 subjects. Nine (9) different chemicals were found with total mean concentration of 279 ng/g lipids in blood serum. (EWG 2005)	5	U.S. hospitals	9
PRDE	Polybrominate d diphenyl ether (PBDE)	Researchers from Columbia University and Johns Hopkins tested 297 cord blood samples from babies born at Johns Hopkins Hospital from Nov. 26, 2004 to March 16, 2005 for 8 PBDE congeners. They report that 94% of the samples contained at least one of the tested congeners. (Herbstman 2007)	297	Baltimore, Md.	T-,
PHDE	Polybrominate d diphenyl ether (PBDE)	Researchers from Indiana University measured levels of 6 PBDEs in 12 paired samples of maternal and cord blood from live births that occurred from Aug, to Dec., 2001. They found that concentrations of PBDEs in both sets of samples were 20-to-106 fold higher than levels reported in a similar study from Sweden, leading them to conclude "human fetuses in the United States may be exposed to relatively high levels of PBDEs." (Mazdai 2003)	12	ľndianapolis, Ind.	6
PBDE	Polybrominate d diphenyl ether (PBDE)	EWG tested cord blood from 10 newborns for 46 polybrominated diphenol ethers (PBDEs) and found at least one of these chemicals in 10 out of 10 participants. Among all 10	10	U.S. hospitals	27-32

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Chemical class	Chemical subclass	Summary of representative study	No. of newborns rested	Place of birth	No. of Chemical s found
10 10 10		participants who tested positive for the chemicals, 27 to 32 different congeners were found. Mean total level was 4,53 ng/g lipids in blood serum. (EWG 2005)			
PBDE	Polybrominate d diphenyl ether (PBDE)	EWG tested cord blood from 10 newborns of minority background for 46 polybrominated diphenyl ethers (PBDEs) and found at least one in all 10 samples. Among all 10 participants who tested positive for the chemicals, 26 to 29 different congeners were found. Mean total level was 72.9 ng/g lipids in blood serum. (EWG 2009).	10	U.S. hospitals	26-29
PBDE	Polybrominate d diphenyl ether (PBDE)	Researchers at Columbia University and Johns Hopkins tested 288 cord blood samples from babies born at Johns Hopkins Hospital from Nov. 26, 2004 to March 16, 2005 for 3 PBDE congeners. In all the 288 subjects, all three congeners were found. (Herbstman 2008)	288	Baltimore, Md.	
PBDE	Polybrominate d diphenyl ether (PBDE) Metabolite	Researchers from the School of Public and Environmental Affairs at Indiana University tested PBDE and PBDE metabolities in 20 pregnant women and their newborn babies who had not been intentionally or occupationally exposed. They noted that metabolites in humans seem to be accumulating. (Qiu 2009)	20	Indianapotis,	
PCB	Polychlorinate d biphenyl (PCB)	Researchers at Columbia University and Johns Hopkins tested 297 cord blood samples from babies born at Johns Hopkins Hospital from Nov. 26, 2004 to March 16, 2005 for 35 PCB congeners. They report levels for 4 of the 35 but note that ">99% (of samples) had at least one detectable PCB congener." (Herbstman 2007)	297	Bałtimore, Md.	DOS
PCB	Polychlorinate d biphenyl (PCB)	Researchers from SUNY Oswego investigated cord blood levels of PCBs in children born between 1991 and 1994 and correlated levels with response inhibition when the children were 4.5 years of age. The researchers found that "results indicated a dose-dependent association between cord blood PCBs and errors of commission." (Stewart 2003)	293	Great Lakes states	7
PCB	Polychlerinate d biphenyl (PCB)	EWG tested cord blood from 10 newborns for 209 polybrominated diphenol ethers (PBDEs) and found at least one of these chemicals in 10 out of 10 participants. Among all 10 participants who tested positive for the chemicals, 98 to 147 different congeners were found. Mean total level was 6.2 ng/g lipids in blood serum. (EWG 2005)	10	U.S. hospitals	98-147
PCB	Polychlorinate d biphenyl (PCB)	EWG tested cord blood from 10 newborns of minority background for 209 polychlorinated biphenyls and found at least one in all 10 samples. Among all 10 participants who tested positive for the chemicals, 98 to 144 different congeners were found, Mean total level was 22.1 ng/g lipids in blood serum. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif.	98-144

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Chemical class	Chemical subclass	Summary of representative study	No. of newborns tested	Place of birth	No. of Chemical Chand
PCB	Polychlorinate d biphenyl (PCB)	Researchers from Harvard, Emory, and the University of Massachusetts at Amherst tested levels of 51 PCB congeners in cord blood from 542 babies born between 1993 and 1998. No information on levels of individual congeners is given; however, the mean sum of PCB congeners 118,138,135, and 180 is 0.25 ng/g and the TEF-weighted sum of mono-ortho PCB congeners 105, 118, 156, 167, and 189 is 6.75 pg/g lipid. (Sagiv 2008)	542	New Bedford, Massachusetts	>4
PCN	Polychlorinate d naphthalene (PCN)	EWG tested cord blood from 10 newborns for 70 polychlorinated naphthalenes and found at least one in all 10 subjects. In all, 31 to 50 different congeners were found with total mean concentration of 0.574 ng/g lipids in blood serum. (EWG 2005)	10 .	U.S. hospitals	31-50
PCN	Polychlorinate d naphthalene (PCN)	EWG tested cord blood from 10 newborns of minority background for 70 polychlorinated naphthalenes and found at least one in all 10 subjects. In all, 17 to 24 different congeners were found, with total mean concentration of 0.637 ng/g lipids in blood serum. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif.	17-24
Pesticide	Carbamate	Researchers from Columbia University, the CDC, and the Southwest Research Institute measured the levels of 29 pesticides in cord plasma from 211 babies born into an urban community in New York City between Sept. 1998 and May 2001. 48% of the babies had exposure to 2-Isopropoxyphenol, 45% to carbofuran, and 36% to bendiocarb. All of the babies were exposed to at least one carbamate. (Whyatt 2003)	211	New York City, N.Y.	5
Pesticide	Fungicide	Researchers from Columbia University, the CDC, and the Southwest Research Institute measured the levels of 29 pesticides in cord plasma from 211 babies born into an urban community in New York City between Sept. 1998 and May 2001. 83% of the babies had exposure to dicloran, 70% to phthalimide. All of the babies had exposure to at least one fingicide. (Whyatt 2003)	211 -	New York City, N.Y.	4
Pesticide	Herbicide	Researchers from Columbia University, the CDC, and the Southwest Research Institute measured the levels of 29 pesticides in cord plasma from 211 babies born into an urban community in New York City between Sept. 1998 and May 2001. 38% had exposure to chlorthal-dimethyl and 20% had exposure to Alachor. All bad exposure to at least one herbicide. (Whyatt 2003)	211	New York City, N.Y.	5
Pesticide	lmide	Researchers from Columbia University, the CDC, and the Southwest Research Institute measured the levels of 29 pesticides in cord plasma from 211 babies born into an urban community in New York City between Sept. 1998 and May 2001. 83% had exposure to dicloran and 70% had exposure to phthalimide. All had exposure to at least one fungicide.	211	New York City, N.Y.	0.00

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Chemical class	Chemical subclass	Summary of representative study (Whyatt 2003)	No. of newborns tested	Place of birth	No. of Chemical s found
Pesticido	Mosquito Repellent	Researchers from Columbia University, the CDC, and the Southwest Research Institute measured the levels of 29 pesticides in cord plasma from 211 babies born into an urban community in New York City between September 1998 and May 2001. 33% of the babies had exposure to diethyltoluamide. (Whyatt 2003)	211	New York City, N.Y.	English and the second
Pesticide	Organochlorine Pesticide (OC)	Researchers from Harvard, Emory, and the University of Massachusetts at Amherst tested levels of 2 organochlorine pesticides in cord blood from 542 babies born between 1993 and 1998. Mean DDE levels were 0.48 ng/g serum. Levels of HCB were not given. (Sagiv 2008)	542	U.S. hospitals	374
Pesticide	Organochlorine Pesticide (OC)	EWG tested cord blood from 10 newborns for 28 organochlorine pesticides and found at least one in all 10 subjects. In all, 21 different pesticides were found. (EWG 2005)	10	U.S. hospitals	21
Pesticide	Organophosph ate Pesticides and Metabolites	Researchers from Columbia University, the CDC, and the Southwest Research Institute measured the levels of 29 pesticides in cord plasma from 211 babies born into an urban community in New York City between Sept. 1998 and May 2001. 71% had exposure to chlorpyrifos (mean 4.7 pg/g) and 49% had exposure to diazinon (mean 1.2 pg/g), the two most commonly detected pesticides. All other pesticides were found in 4% or less of the samples and all babies had exposure to at least one of the organophosphates. (Whyatz 2003)	211	New York City, N.Y.	8
Pesticide	Pyrethroid	Researchers from Columbia University, the CDC, and the Southwest Research Institute measured the levels of 29 pesticides in cord plasma from 211 babies born into an urban community in New York City between Sept 1998 and May 2001. 7% had exposure to transpermethrin and 13% had exposure to cispermethrin. (Whyatt 2003)	211	New York City, N.Y.	2
PFC	Perfluorochemi cal (PFC)	Researchers from CDC, Columbia University, and Johns Hopkins tested cord blood from 299 babies born at Johns Hopkins Hospital between Nov. 26, 2004 and March 16, 2005 for 10 PFCs. They detected PFOS in 99% and PFOA in 100% of samples. Eight other PFCs were detected at lesser frequency. (Apelberg 2007)	299	Baltímore, Md.	9
PFC	Perfluorochemi cal (PFC)	EWG tested cord blood from 10 newborns for 12 perfluorochemicals and found at least one of these chemicals in 10 out of 10 participants. Among all 10 participants who tested positive for the chemicals, 9 of 12 different chemicals were found with total mean concentration of	10	U.S. hospitals	9

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Chemical class	Chemical subclass	Summary of representative study 5.86 ng/g in whole blood, (EWG 2005)	No. of newborns tested	Place of birth	No. of Chemical Cound
PFC	Perfluorochemi cal (PFC)	EWG tested cord blood from10 newborns of minority background for 13 perfluorochemicals and found at least one of these chemicals in 10 out of 10 participants. Among all 10 participants who tested positive for the chemicals, 6 of 13 different chemicals were found with total mean concentration of 2.38 ng/g in whole blood. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif.	6
Plastic	Bisphenol A & BADGE	Researchers from the Environmental Working Group measured BPA levels in cord blood from 10 newborns of minority background. BPA was found in 9 of 10 samples with a mean level of 2.18 ng/L. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif.	The second secon
Rocket fuel	Perchlorate	Researchers from the Environmental Working Group measured perchlorate levels in cord blood from 10 newborns of minority background. Perchlorate was found in 9 of 10 samples with a mean level of 0.209 ug/L. (EWG 2009)	10	Mich. Fla. Wis. Mass. Calif,	2

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# Attachment B: Studies show everyday chemical exposures are linked to serious adverse health effects

Chemical	Study Population	Finding	Range of concentrations in population studied (ppb)
Phthalates	Infant boys (n=85)	Boys with higher prenatal exposure to phthalates (measured in maternal urine) had decreased anogenital distance (Swan et al 2005).	Mono-isobutyl phthalate (MiBP): Not detected (ND) to >7.7 Mono-benzyl phthalate (MBzP): ND to >25.8 Mono-n-butyl phthalate (MBP): ND to >38.7 Mono-ethyl phthalate (MEP): ND to >1076
Bisphenol A (BPA)	Children (n=249)	Parents of children with higher exposure to BPA during early pregnancy (as measured in maternal urine) report higher incidence of behavioral effects in daughters, including increased aggression and hyperactivity (Braun et al 2009).	ND to >37.3
Bisphenol A (BPA)	Adults (n=2,605)	Adults with higher BPA levels in urine reported higher prevalence of cardiovascular disease (Melzer et al 2010a).	ND to 80.1
Brominated flame retardants (PBDEs)	Newborns (n=288)	Newborns with higher levels of certain PBDEs in cord blood serum had decreased levels of thyroid hormones critical to normal brain development (Herbstman et al 2008).	Bromodiphenyl ether congener 47 (BDE-47): 1.1 to 311 BDE-100: 0.5 to 77
Perfluorochemicals (PFCs)	Newborns (n=293)	Newborns with higher levels of two PFCs in cord blood serum, PFOA and PFOS, were found to have lower birth weight and head circumference (Apelberg et al 2007).	Perfluorooctane sulfonate (PFOS): ND to 34.8 Perfluorooctanoic acid (PFOA): 0.3 to 7.1
Perfluorochemicals (PFCs)	Adults (n=3,974)	Adults with higher levels of two PFCs in their blood serum, PFOA and PFOS, reported higher prevalence of thyroid disease (Melzer et al 2010b).	PFOA: 0.1 to 123 PFOS: 0.1 to 435
Brominated flame retardants (PBDEs)	Adult women (n=223)	Women with higher levels of certain PBDEs in their blood serum were found to have significant decreases in their ability to conceive (Harley et al 2010).	BDE-47: ND to >25.2 BDE-100: ND to >4

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# ATTACHMENT C: Public Health Costs of Chemical Exposures

Disease	Cost or burden associated with chemical	Finding
	exposures	
Childhood Diseases	\$55 billion	An authoritative 2002 study attributed all lead poisoning cases, 30 percent of asthma cases, 10 percent of neurobehavioral disorders and 5 percent of pediatric cancers to chemical pollution. The study, led by pediatrician Philip J. Landrigan, director of the Children's Environmental Health Center at Mount Sinai School of Medicine, estimated the annual costs of this toxic disease burden at \$55 billion, nearly 3 percent of U.S. health care costs at the time (Landrigan 2002).
Neurodevelopmental Disease	Up to \$83.5 billion	The annual cost of neurodevelopmental disease is estimated at \$81-to-167 billion per year. As much as half may be due to exposure to toxic chemicals, according to a 2001 study led by economist Torn Muir of Environment Canada (Muir 2001).
Mercury-linked IQ Loss	\$8.7 billion	Low-dose exposure to mercury and other neurotoxic chemical pollution can cause severe and sometimes lifelong neurobehavioral and cognitive problems, according to the National Institutes for Environmental Health Studies (Mendola 2002). A 2005 study by Mount Sinai researchers estimated the costs of this loss of intelligence and productivity from childhood mercury poisoning at \$8.7 billion a year (Trasande 2005). Mercury is just one of 201 chemicals known to be neurotoxic in humans (Grandjean 2006).
Chronic Childhood Disease	Up to 80-90%	Mount Sinai's Landrigan estimates that genetics account for only 10-20 percent of cases of chronic disease in childhood in the U.S. and other industrialized nations (Landrigan 2001). This includes: birth defers, the leading cause of infant death; developmental disorders such as attention deficit hyperactivity disorder and autism; asthma, which more than doubled in incidence from 1980 to 1996, according to the Centers for Disease Control and Prevention (Moorman 2007); and childhood leukemia and brain cancer, on the rise since the 1970s (Gürney 1996; Linabery 2008). Landrigan's team and other specialists say that many diseases, from respiratory illness to immune, thyroid and neuropsychological deficits, are likely linked to environmental toxins (Etzel 2004; Sty 2008; Wigle 2008).
Developmental Problems	28 percent	An expert committee of the National Academy of Sciences concluded in 2000 that a combination of environmental and genetic factors cause 25 percent of American children's developmental problems, including low birth weight, neurobehavioral deficits and pre- and post-natal death. The report estimated that another 3 percent are caused by toxic environmental exposures alone (NRC 2000).
Children on Medication	26 percent of all children (irrespective of link to chemical exposures)	In 2007, 26 percent of Americans age 19 and under took prescription drugs for chronic health problems, according to a major pharmaceutical benefit provider. The most commonly dispensed medications were treatments for asthma and allergy, followed by attention deficit/hyperactivity disorder (ADHD) and depression (Medco 2008). No one knows for sure how much chemical exposures contribute to this disease burden, but a wide range of compounds have been linked to the most common children's health problems, including 82 types of chemicals or pollution linked to asthma (Janssez 2009).
Lifetime Disability		Chemical injury to developing organs in a young child or an infant can cause lifelong disability (NRC 1993, U.S. EPA 1998). Numerous studies have linked early exposure to chemical pollutants to later health problems, including a sathma and respiratory disorders; thyroid deficits; cardiovascular disease; learning disabilities, intellectual delay, loss of IQ points and corresponding loss of earning potential; and neurodegenerative conditions such as Parkinson's disease (Boyd 2008; Etzel 2004; Landrigan 2002; Muir 2001; Weiss 2000).
Indirect Costs		The U.S. EPA and the European Organization for Economic Cooperation and Development (DECD) say the true costs of chronic childhood illnesses include: parents' earnings forgone to care for child; value of missed school days; child's foregone earnings; effects of reduced educational attainment on child's future earnings; reduced labor force associated with developmental disabilities. (OECD 2006, U.S. EPA 2002).
Human Diseases Linked to Exposures	182 diseases	Based on a comprehensive review of scientific literature, researchers at the University of California, San Francisco and Boston Medical Center documented 182 human diseases and health problems, including birth defects, as
"Serious Threat to Children"		At the 2004 international summit on chemicals and health at the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris, 154 prominent scientists, physicians and other experts from the U.S. and 18 other nations signed a statement asserting that chemical exposures are a "serious threat to children" (PA 2005).

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# ATTACHMENT D: Overview of EWG's Research on Priority List Chemicals

Priority Chemical	Overview of Environmental Working Group's Research
Bisphenol A	In 2007, a landmark study by EWG found BPA in 57 percent of canned food samples tested (EWG 2007). Last year, for the first time in U.S. infants, EWG detected BPA in 9 of 10 umbilical cord blood samples (EWG 2009a). This month, EWG reported finding high levels of BPA in 40 percent of receipts from major U.S. businesses and services (EWG 2010b).
Perchiorate	In 2003, EWG analyzed data on perchlorate contamination of tap water and groundwater in California and other states (EWG 2003a), EWG found high levels of the thyroid toxin in lettuce samples and cow's milk (EWG 2003b, EWG 2004). EWG's in-depth analysis of data from the Centers for Disease Control and Prevention found that millions of American women of child-bearing age were at risk of abnormal thyroid hormone levels during pregnancy (EWG 2006).
Trichloroethylene, tetrachloroethylene, methylene chloride and vinyl chloride	The 2009 edition of EWG's National Tap Water database, highlighting contaminants in drinking water, reported that trichloroethylene had been detected in water from 653 utilities in 39 states; tetrachloroethylene in water from 803 utilities in 40 states; methylene chloride in water from 841 utilities in 37 states; and vinyl chloride in water from 121 utilities in 27 states (EWG 2009b). All cases exceeded federal health guidelines, and many surpassed EPA's legal limits.
Hexavalent chromium	In 2005, EWG partnered with the Wall Street Journal to expose a fraudulent journal article, ghostwritten by an industry consultant, that denied a link between hexavalent chromium and stomach cancer (EWG 2005b). California state scientists found a statistically significant increase in stomach cancer among chromium-exposed people. EWG's exposé led the journal to retract the article.
Phthalates	EWG's "Beauty Secrets" report, published in 2000, analyzed CDC data finding dibutyl phthalate present in every person tested (EWG 2000). In 2008, EWG reported detecting phthalates in adolescent girls (EWG 2008).
Formaldehyde	In March 2009, laboratory tests by EWG and the Campaign for Safe Cosmetics found that 23 out of 28 children's personal care products were contaminated with formaldehyde, a probable carcinogen (EWG 2009c).
Hexane	In a July 2009 study entitled Bottled Water Quality Investigation: 10 Major Brands, 38 Pollutants, EWG found hexane, an industrial chemical, in 4 of 10 brands tested (EWG 2009d).

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Mr. RUSH. We want to suspend just for a moment while the technicians attempt to work with the sound system. We will suspend just for a moment while they are—

[Recess.]

Mr. Rush. Let us continue now. The Chair now recognizes Mr. Williams for 5 minutes for the purposes of an opening statement.

#### STATEMENT OF HOWARD WILLIAMS

Mr. WILLIAMS. Thank you, Chairman Rush, Mr. Waxman, Mr. Whitfield, Subcommittee, and staff for inviting me to give a business perspective on TSC 5820. I am Howard Williams, I am Vice President, General Manager of a company that makes building products and we are-my division is in Central Pennsylvania. We have about 360 employees at our facilities and when we add corporate marketing and R and D into that mix we have added about another 100 people. So Central Pennsylvania is where we are located. We are part of a small multi-national. We have—we are privately held; we are U.S. owned. We operate from 25 sites in 19 countries, and we make our contextual building products in the non-residential end of things. Domestic construction amounts for about 14 percent of our gross domestic product here and this bill has an opportunity to really help and to inform, and to grow that level of construction not just here in the U.S., but also I could not find the figures for what we export relative to architectural design and relative to building products as a nation as a whole. But I am certain of great multipliers upon the 14 million.

In the areas that we are particularly interested in and think that actually could help to create jobs, and we will talk a bit more about that later, are the minimum data sets, the prioritization, access to disclosure, and restricting the PBT's. Chemicals and the elimination of PBT's are at the forefront of all of our building standards. I have referenced in my written testimony the federal standards that require environmentally preferable purchasing require that buildings are built in accordance with lead U.S. green building standards. They are very clear. They are wonderfully explicit. Get the PBT's out of here. We interact—people interact with the building products, we interact with the furnishings within the spaces that we live and enjoy and we also have an opportunity periodically to interact with the PBT's that are off-gassing from those materials

from within products.

Globally we add 78 million people to planet. Ninety percent of what we do as people is inside of a building, so it is within buildings and building materials that there is a great opportunity to make a very real difference in chemical exposure and product exposure. As a company we now seek to know the chemistry of our building materials down to 100 parts per million. We want to know what 99.99 percent of our building products contain because that is the first step for us to be able to eliminate PBT's, chemicals of concern, carcinogens. But identifying that chemical composition is a costly and time consuming process. We have to almost literally reach through layer upon layer within the supply chain and pull that information forward because disclosure is not a subject that endears a researcher to many other suppliers.

But it is essential, however that work needlessly adds cost and delay to the process. There is a great business case for what we are doing. We as a company are growing. We as a company are adding jobs and again we are located in Central Pennsylvania. The construction sectors have been hit hard, but we are growing and adding jobs because of what we are doing because of the market reception. So there is a great business case for doing what we are doing. There is also a case though to be made for this is a profitable and a responsible thing to do. The result of that though is access to this change and to greater improvements is something that the general population doesn't always have access to. More disclosure, better understanding, or I would even say access to disclosure. It is really going to help manufacturers of our products that are wanted by other countries that we are going to be able to export and grown in our businesses. Access to that disclosure is critical. And again environmentally preferable purchases are required on the basic premises of an act though is that you use recycled material. Today, tomorrow, and for generations we will be recycling materials that contain carcinogen materials, components, that contain PBT's, so in all of this in this great dynamic of growth of population, in the growth of proliferation of green products and Acts standards, we are going to be multiplying some of these PBT's over, and over, and over again. And the result of that is going to be exposing more people. We strongly support data sets, prioritization of chemicals, disclosure, restricting the PBT's, and I fully recognize that this disclosure end of things is a very, very difficult subject. We are in business. We don't like competition to know what we are doing. We don't want them to know what we are doing, so disclosure's going to be the toughest point that you as a group have to deal with and build into this legislation. But it is a time for innovation, it is a great time for people environmentalism. The market wants these products. We are tied to it. It is just chemistry and what is going on in this world as we heard, 90 percent of everything has chemistry involved in it. So what a marvelous, marvelous time where environmentalism, consumerism, and these changes can come together and make a strong America, make job growth, redefine green jobs, and the result of that is to take care of some of the unintended consequences that we face with on a day to day basis. So

[The prepared statement of Howard Williams follows:]



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Congress of the United States
House of Representatives
Committee on Energy and Commerce
Subcommittee on Commerce, Trade, and Consumer Protection
Hearing on H.R. 5820, the Toxic Chemicals Safety Act of 2010

Oral Testimony of Howard Williams, Construction Specialties, Inc.

Thank you Chairman Rush, Representative Waxman and Members of the Subcommittee for inviting me to give our Company perspective on this matter.

I'm Howard Williams, V.P. & General Manager of the Pennsylvania division of Construction Specialties.

We're a small multi-national, privately owned, US Company with worldwide revenues of \$300MM and a staff of 1700.

We are headquartered in Lebanon, NJ and operate from 25 sites in 19 countries where we develop and manufacture architectural building products for nonresidential construction. (Office buildings, hospitals, schools, government buildings.) Our manufacturing facilities in central Pennsylvania have over 360 employees.

Domestic construction accounts for over 14% of our GDP, and HS 5820 has the potential to inform and support this powerful and profitable segment of our economy.

Chemicals and the elimination of PBTs from our built environment are at the forefront of materials purchasing and building standards for private and governmental programs.

Federal Environmentally Preferred Purchasing standards address PBTs, as do the LEED, green building standards under which our government buildings are constructed.

We interact with building materials and furnishings. We don't just enjoy the functional and aesthetic qualities of products; sometimes we breathe and absorb the PBTs off gassing from within the materials.

Globally, 78 million people are added to our planet each year, and, on average, 90% of all human activity takes place inside a building, and it is in this that we, as a company, act on our mission; Making Buildings Better.

We now seek to know the chemistry of our materials down to 100 ppm, or 99.99% of what's in each of our products. Knowing the chemicals in a product is the first step to determining whether the product contains a chemical of concern like PBTs or carcinogens.

Identifying the chemical composition of our products is a costly and time consuming process. It requires reaching through several layers within a supply chain and pulling forward information that is unknown at certain levels, and thought to be, or is, confidential

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at other levels. It needlessly delays product development and places an indirect cost burden on the consumer.

There is a business case for doing what we're doing. We're fortunate to have the financial and social commitment to this form of product development and differentiation. From being able to act on our mission, to creating a strong competitive advantage in an ever increasing green building product market, we gain on several levels.

But the benefits to a population larger than we can ever reach will come only when Chemicals Policy Reform is enacted and access to chemical disclosure is commonplace.

Environmentally preferable and green building standards reward those whose materials have high amounts of recycled content. But the unintentional consequence is that PBTs will be recycled from one generation to another, and today's material composition will have lasting impacts on future generations.

Given the economic and population multipliers, coupled with America's global reach, H R 5820 becomes one of the more beneficially impactful pieces of legislation of our generation.

Minimum data sets become uniform templates for material selection at many levels within the design-to-commercialization process.

Prioritizing the safety determinations gives business a view into the future and allows early decisions while awaiting outcomes.

Disclosure to commercial purchasers sends essential information down the supply chain to the product developer.

Restricting the use of and exposure to chemicals of concern like PBTs, and promoting safer alternatives to them creates markets that are sustainable to businesses, consumers and the environment.

Our experience in trying to get ingredient information confirms that Disclosure is a highly charged issue, but worthy of the work required to reach a solution. Using a 3<sup>rd</sup> party intermediary was the only way we were able to learn whether a supplier's material met our requirements.

When will we find another time when people-centered environmentalism, consumerism and business interests are so well aligned?

It's a time for innovation and product development.

And a time for domestic and international business growth.

Meeting customer's needs and acting upon society's higher values has always been rewarded, and in today's terms that's a \$10 billion annual reward.

Our economy and our health are inextricably joined, and fundamental to a strong America.

Cancer, Parkinson's, Leukemia, Autism, Alzheimer's, and Endometriosis are non-partisan, and without prejudice or respect of status, affiliation or age, kill, destroy lives and pose a constant threat.

Close one door and it seems these diseases will come in through another, but it's vitally important that we close doors as we find them open.

You, through TSCA Reform, and we, through responsible product development and delivery, have an opportunity to close this door.

Let's join with others and close this door.

Thank you.

# Committee on Energy and Commerce

U.S. House of Representatives
Witness Disclosure Requirement - "Truth in Testimony"
Reprint in House Pols VI Chara 160

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		Are you testifying on behalf of a Federal, State, or local Government entity?	Yes	No X
,	2.	Are you testifying on behalf of an entity that is not a Government entity?	Yes X	No
	3.	Please list any Federal grants or contracts (including subgrants or sub- you personally have received on or after October 1, 2006:	contracta)	that
		NONE		
	4.	Other than yourself, please list which entity or entities you are represe	uting:	
		PA Division of Construction Specialties, Inc.		
	5.	If your answer to the question in item 2 in this form is 'yes,' please list elected positions held or briefly describe your representational capacit disclosed in the question in item 4:  I am the Vice President/General Manager, Pennsylvania Construction Specialties, Inc.	y with the	entities
	б.	If your answer to the question in item 2 is 'you,' do any of the		
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July 27, 2010

Howard J. Williams

V.P. General Manager, Construction Specialties, Inc.

P.O. Box 380

Muncy, PA 17756

570.549.5941

Pennsylvania Division:

362 full time staff

3 facilities totaling 284,000 SF of manufacturing and offices

Start date: 02.22.77

Education background:

**Building Construction** 

Architecture

**Business Administration** 

Professional Certification:

LEED AP + ID & C

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# Section 1

# **Federal Standards**

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http://www.epa.gov/epp/pubs/guidance/finalguidance.htm Last updated on Thursday, January 28, 2010 Environmentally Preferable Purchasing (EPP)

You are here: EPA Home Prevention, Pesticides & Toxic Substances Pollution Prevention
Environmentally Preferable Purchasing Policy & Guidance
Environmentally Preferable Purchasing

# EPA's Final Guidance on Environmentally Preferable Purchasing

As published by the EPA on August 20, 1999.

I. Introduction
II. Intended Audience of This Guidance
III. Overall Approach for Implementing Executive Order 13101
IV. Guiding Principles
V. Executive Agency Implementation
VI. List of Resources

# VII. Appendices I. Introduction

On September 14, 1998, former President Clinton signed Executive Order (EO)13101, entitled "Greening the Government through Waste Prevention, Recycling and Federal Acquisition." Executive Order 13101 (EO 13101) supersedes EO 12873, Federal Acquisition, Recycling and Waste Prevention, Issued on October 20, 1993, but retains a similar requirement for the U.S. Environmental Protection Agency

(EPA) to develop guidance to "address environmentally preferable purchasing." (Section 503, EO 13101) The Final Guidance that follows is based on EPA's September 1995 Proposed Guidance on the Acquisition of Environmentally Preferable Products and Services (60 FR 50721, September 29, 1995) and comments received on that Proposed Guidance as well as lessons learned from pilot projects conducted to date.

The Final Guidance below is designed to help Executive agencies meet their obligations under EO 13101 to identify and purchase environmentally preferable products and services. Section 503 (c) of EO 13101 directs Executive agencies to "use the principles and concepts in the EPA Guidance on Acquisition of Environmentally Preferable Products and Services, in addition to the lessons from the pilot and demonstration projects to the maximum extent practicable, in identifying and purchasing environmentally preferable products and services" and "modify their procurement programs as appropriate." Furthermore, Section 23.704 of the Federal Acquisition Regulation requires agencies to "affirmatively implement" the objective of "obtaining products and services considered to be environmentally preferable (based on EPA-issued guidance)."

"Environmentally preferable" is defined in Section 201 of EO 13101 to mean products or services that "have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison

Key Policy, Guidance Documents

EPA's Final Guidance on EPP Executive Orders Federal Acquisition Regulation Green Purchasing Guides Information on Standards for Green Products. Services

> Versions of EPA's Final EPP Guidance

PDF Version (46pp, 132 KB). Federal Registrar (PDF) (50pp, 3.34MB).

**EPP Final Guidance Brochure** 

You will need the free Adobe Reader to view some of the files above. See EPA's PDF page to learn more.

http://www.epa.gov/epp/pubs/guidance/finalguidance.htm

3/3/2010

may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service."

Implementation of the Final Guidance will draw on the procurement experience of the Executive agencies and on the environmental expertise of EPA and other organizations both within and outside of the Federal government. This guidance provides a broad framework of issues to consider in environmentally preferable purchasing and will help Executive agencies systematically integrate environmental preferability principles into their buying decisions.

The guidance is not, however, a step-by-step, "how to" guide and it is not intended to answer many of the specific questions that might arise in the acquisition of a particular product category or service. The list of resources in Section VI provides more specific guidance and information about various product and service categories, environmental attributes that have been identified for them, and the approaches used to consider those attributes in acquisition decisions. For the latest information on other resources and tools under development, Executive agency personnel and others are directed to EPA's Environmentally Preferable Purchasing Program Web site.

The Final Guidance strives to meet the National Performance Review and procurement reform goals of simplifying and streamlining Federal purchasing while recognizing that the definition of "environmentally preferable" will likely require the consideration of different environmental factors as appropriate for different situations. In sum, the guidance:

- Applies to all acquisition types, from supplies and services to buildings and systems.
- Provides a set of guiding principles.
- Requests Executive agencies to select and implement pilot acquisitions or demonstration projects.
- Provides a framework for Executive agencies to implement the environmentally preferable purchasing provisions of E013101.

#### II. Intended Audience for the Guidance

The target audience of this guidance includes all Executive agency employees involved in the acquisition of supplies, services, systems, and/or facilities. The general guidance and the information generated by the pilot projects also will be useful to Executive agency employees who request, maintain, or use the supplies, services, systems and facilities. In addition, both the general guidance and the pilot project information should provide pragmatic direction for private sector businesses who wish to manufacture, market, or provide environmentally preferable products and services for use by the Federal government.

### III. Overall Approach for Implementing Executive Order 13101

Section 503 of EO 13101 has two key components: (1) development of this guidance; and (2) implementation of the guidance through pilot and demonstration projects. This guidance sets a broad policy framework for implementing environmentally preferable purchasing within the context of Federal government. For the second component, Section 503 (b) of the EO states "[A]gencies are encouraged to immediately test and evaluate the principles and concepts contained in the EPA's Guidance... through pilot projects...". These pilots may be undertaken using the in-house expertise of EPA and other Executive agencies, as well as the technical expertise of nongovernmental entities, including, but not limited to, voluntary

consensus standards bodies (see§ 12(d) of the National Technology Transfer and Advancement Act (Pub. L. 104-113, §12(d), 15 U.S.C. 272 note), environmental standard setting organizations, third party certification programs, environmental labeling or environmental "report card" programs, and other environmental consulting organizations. Section V of this Final Guidance provides more detail about how these pilot projects might work. These pilots are expected to yield more specific and practical information about applying this Final Guidance to purchases of particular products and services.

In addition to promoting environmentally preferable purchasing, EO 13101 encourages Executive agencies to purchase bio-based products. (Section 504 (b)). Under the EO, "blobased product" means "a commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal and marine) or forestry materials.

Bio-based products may also be environmentally preferable. Made from renewable resources by definition, these products have many positive environmental aspects and should be considered by agencies looking to make environmentally preferable purchases. However, Federal purchasers should not assume all big-based products are automatically environmentally preferable. As with other products, Executive agencies should consider a range of environmental impacts associated with bio-based products when making purchasing decisions. In some cases, factors such as pesticide use or high water consumption might make a bio-based product less environmentally preferable. The list of bio-based products which the U.S. Department of Agriculture will issue under Section 504 of EO 13101 will be a good starting point for Executive agencies looking to Identify environmentally preferable purchasing. During the development of pilots under Section 503 (b) of the EO, EPA will look for opportunities involving bio-based products.

#### IV. Guiding Principles

EPA has developed five guiding principles to provide broad guidance for applying environmentally preferable purchasing in the Federal government setting. Applicability of these principles in specific acquisitions will vary depending on a variety of factors, such as: the type and complexity of the product or service being purchased; whether or not the product or service is commercially-available; the type of procurement method used (e.g., negotiated contract, sealed bid, etc.); the time frame for the requirement; and the dollar amount of the requirement.

In all acquisitions, Executive agency personnel use their professional judgement and common sense, whether assessing a product or service's performance, cost, or availability. Similarly, in applying these environmentally preferable principles Executive agency personnel should use reasonable discretion about the level of analysis needed to determine environmental preferability. For example, an extensive life cycle assessment might not be conducted to purchase rubber bands. On the other hand, for large-volume or systems acquisitions, or for complex products, such assessments may be appropriate, and might already be required. Or, in some cases, much of the information upon which to build such an analysis might have aiready been collected.

Guiding Principle 1: Environment + Price + Performance = **Environmentally Preferable Purchasing** 

Environmental considerations should become part of normal purchasing practice, consistent with such traditional factors as product safety, price, performance, and availability.

The manufacture, use, and disposal of certain products might have adverse impacts on human health and the environment. These impacts impose costs that the purchasing entity, and ultimately, society as a whole, end up paying for in one way or another. For the Federal government, the hazardous or toxic nature of a product or service can result in significant cleanup or liability costs, as well as in less directly quantifiable, but cumulative and persistent environmental damage. Even non-hazardous waste is associated with ever-increasing disposal costs that can be avoided or reduced. Responsible management, beginning with the initial purchase of products and services that minimize environmental burdens, can diminish the Federal government's raw material, operating, maintenance, and disposal costs. In addition, a product or service's environmental preferability can often have positive impacts on its overall performance.

For these reasons, the Federal government's purchasing decisions are no longer confined to considerations of price and functional performance but should include considerations of environmental performance as well. Today agencies can obtain improved environmental attributes not at the expense of, but instead may operate in concert with, other traditional factors like price and functional performance. Those product or service providers who can optimize all these factors will capture and maintain the largest market-share of government customers.

Just like price, performance, and health and safety, environmental factors should be a subject of competition among vendors seeking government contracts. In turn, this increased competition among vendors should stimulate continuous environmental improvement and increase the availability of environmentally preferable products and services. The purpose of this guidance is to encourage Executive agencies to award contracts to companies that take environmental concerns into account. This process, consequently, will lead to the development of environmentally preferable products and services that perform better and cost less because they reduce waste and negative environmental impacts. As stated, this principle reflects the spirit of a number of reinvention initiatives at EPA and across the Federal government almed at testing cleaner, cheaper, and smarter approaches to environmental protection.

Agencies have considerable discretion in incorporating environmental preferability into procurement decisions, especially within the context of "best value" contracting. For example, environmental considerations that result in payment of a price premium for goods or services may be reasonably related to an agency's definition of its "minimum needs" and, therefore, may be permissible. This is not much different than paying a higher price for better performance or quality. Federal personnel may consider paying a reasonable premium for environmentally preferable products on a number of grounds. For example, a reasonable price premium may be justified because the environmental attributes of a product or service provide offsetting reductions in operating and disposal costs.

## **Guiding Principle 2: Pollution Prevention**

Consideration of environmental preferability should begin early in the acquisition process and be rooted in the ethic of pollution prevention, which strives to eliminate or reduce, up-front, potential risks to human health and the environment.

It is never too early in the acquisition process to begin considering environmental preferability. Pollution prevention, the reduction or elimination of waste at the source, can not only reduce pollution, but it can save money for agencies as well. Defense and civilian

Federal agencies have ongoing programs for pollution prevention under EO 12856 and other authorities that can result in cost savings throughout the product or service life cycle. Furthermore, pollution prevention measures can lead to a higher degree of environmental protection by reducing subsequent costs for disposal or cleanup of hazardous wastes and materials. A key reason for environmentally preferable purchasing is to protect the environment by reducing waste and pollution at the source with the resulting benefit of reduced overall cost to the government and the public (taxpayers and society as a whole).

Under this guiding principle, pollution prevention should be the primary motivation and strategy for the Federal government's implementation of environmentally preferable purchasing. There are many ways to apply pollution prevention to the acquisition process:

- a. Customized purchases or projects in which program managers, architects, engineers, systems designers, or others have input into the design phase afford agencies an early opportunity to apply environmentally preferable concepts. In addition, early involvement offers agencies a unique point of leverage from which to address environmental impacts. Although these types of purchases are not the bulk of Federal acquisition requirements, the early stage of customized product or project design is the time when decisions about different approaches, materials, and manufacturing processes are made. Estimates show that 70 percent or more of the costs associated with product development, manufacture, and use are determined during the initial design stages. By Incorporating environmental factors during product or service design, Federal agencies can minimize environmental problems and their associated costs. For example, early environmental consideration helps agencies avoid potential liabilities due to fines as well as the costs of record keeping and reporting.
- b. During the early stages of acquisition, Executive agency personnel can also apply a systems analysis approach for certain products or services (such as computers, buildings, and transportation systems) in which a number of components have interdependent functions. A systems analysis approach takes into consideration the full set of product elements, focusing on how they interact from a life cycle perspective and helping to identify the most efficient options for meeting the government's needs.
- c. Executive agency personnel might also appropriately ask whether a product or a service is even necessary or can be replaced by a less damaging process. For instance, in degreasing operations, questions arise as to whether an efficient cleaner using halogenated solvents is better or worse for the environment than an aqueous-based cleaner. A more appropriate question may be whether the cleaning/degreasing step can be eliminated without affecting the overall performance of the product or system. This might be accomplished, for example, by consolidating cleaning and degreasing in a later stage of the manufacturing process or changing the process itself. As this example illustrates, environmental preferability does not just involve substituting a "green" product for another. It also involves questioning whether a function needs to be performed and how it can best be performed to minimize negative environmental impacts.

The Department of Defense integrates pollution prevention into all of its major weapons system acquisition programs. For example, the New Attack Submarine (NSSN) Program has worked to include environmental considerations in all phases of the submarine's life cycle, from initial design to eventual disposal some 30 or more years later.

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By considering all viable environmental alternatives during the design phase, the NSSN Program identified a number of options that will result in benefits. Just a few examples are listed below:

- A redesigned nuclear reactor core will eliminate the need for refueling and disposal of spent nuclear fuel, while achieving a
- multi-million dollar cost avoidance.

  31 percent reduction in the number of paints and coatings used in manufacturing the NSSN while ensuring that all of the selected paints satisfy applicable performance and
- environmental requirements.
  61 percent reduction in the number of adhesive products to be used on the NSSN compared to the number required for previous submarine classes
- 80 percent reduction in the number of solvents and cleaners. Research and development effort to identify and test a biodegradable hydraulic fluid for submarines to replace the current toxic mineral oil-based fluid.

By recognizing early on that the key to reducing environmental impact throughout the ship's life cycle is pollution prevention and hazardous material control and management, the NSSN Program was able to design a submarine that meets strict safety and performance requirements, achieves significant cost savings, and minimizes risk to the environment.

# Guiding Principle 3: Life Cycle Perspective/Multiple Attributes

A product or service's environmental preferability is a function of multiple attributes from a life cycle perspective.

Federal agencies should consider the following concepts in applying this principle:

a. Life cycle perspective - A product or service has environmental impacts long before and after the Federal government purchases and uses it. The manufacture, use, distribution, and disposal of products create a variety of burdens on the environment. Federal agencies should strive to purchase products or services with as few negative environmental impacts in as many life cycle stages as possible. In other words, Federal agencies should determine the "environmental preferability" of a product or service by comparing the severity of environmental damage it causes throughout its life cycle with that caused by competing products—from the point of raw materials acquisition, product manufacturing, packaging, and transportation to its use and ultimate disposal. By doing so, the Federal government can minimize the overall environmental impacts of products and services. In addition, by actively seeking and considering life cycle information to inform buying decisions, Executive agency personnel can send a clear signal that government business will go to those who consider the effect of their product's life cycle on the environment.

#### Life Cycle Stages of a Typical Product

Although most people would agree that considering life cycle impacts in purchasing decisions is desirable, there are disagreements on how to make purchasing decisions that best reflect a life cycle perspective. Even the term "life cycle" is interpreted differently by different people.

To some, it connotes an exhaustive, extremely time-consuming, and very expensive analysis. To others, a life cycle perspective is possible in an abbreviated process, in which a long list of potential environmental attributes and/or impacts is narrowed to a few, allowing for comparison across a particular product category. In addition, the ability of Federal purchasers to make buying decisions from a life cycle perspective depends on a variety of factors including: the type of product or service being purchased; the availability of life cycle information and/or willingness by the provider to give the information; and the availability of easy-to-use tools that can translate this information to support purchasing decisions by the Federal government. EPA recognizes that agencies may find it easier to apply a life cycle perspective when the result will be internal agency environmental benefits and/or cost savings rather than external benefits. Nevertheless, EPA encourages agencies to consider reducing impacts along all stages of the product or service life cycle.

This guidance promotes the use of a range of practices, from life cycle considerations to a more rigorous, scientifically defensible life cycle assessment methodology. EPA encourages Executive agencies to use currently available tools as well as help refine and address the needs of Federal purchasers. Examples of available tools and references are listed in Section VI. For the most current list of available tools, Executive agency personnel are referred to EPA's EPP Program Web site. EPA also encourages experts both within and outside of the Federal community to develop additional life cycle tools to support environmental preferability decisions.

b. Multiple environmental attributes - Environmental preferability should reflect the consideration of multiple environmental attributes such as increased energy efficiency, reduced toxicity, or reduced impacts on fragile ecosystems. In addition, these attributes should be considered from a life cycle perspective. Focusing on one environmental attribute of a product or a service, without considering others, might inadvertently exclude important impacts on the determination of environmental preferability. For example, improving one attribute (e.g., increased energy efficiency or reduced toxicity) may result in other unintended environmental life cycle impacts. It is also possible that focusing on a single aspect of the product or service will cause Executive agency personnel to overlook improvements that the vendor has or can make in other aspects of the product or service. In short, it is difficult to be confident that an alternative product is environmentally preferable without some consideration of multiple attributes from a life cycle perspective. Analytical tools such as life cycle assessment can help Federal agencies ensure the product or service they purchase does not create new problems for some other aspect of the environment by identifying other potential negative impacts that should be alleviated.

Although the determination of environmental preferability should be based on multiple environmental attributes, Federal agencies may at times make purchasing decisions based on a single attribute when that attribute distinguishes the product or service in a category. In its environmentally preferable purchasing effort, EPA aims to build upon those attributes that are well-defined, measurable and familiar to Federal purchasers (e.g., recycled content and energy efficiency). EPA also seeks to support the development of similar definitions and measures for other attributes that are less understood and to advance consideration of multiple environmental attributes in purchasing decisions.

The menu of environmental attributes described in Appendix B offers a preliminary look at what should be considered in environmentally preferable purchasing decisions. Many of the attributes are relevant to a number of different product life cycle stages, while others are more pertinent to one particular stage. The menu should serve as a means to inform Executive agency personnel about the different types of attributes that can make a product or service environmentally preferable. Each and every element in the menu is not meant to

be applicable to all products and services nor is the menu all-inclusive

Guiding Principle 4: Comparison of Environmental Impacts

Determining environmental preferability might involve comparing environmental impacts. In comparing environmental impacts, Fed agencies should consider: the reversibility and geographic scale of the environmental impacts, the degree of difference among competing products or services, and the overriding importance of protecting human health.

In determining environmental preferability, Executive agency personnel might need to compare the various environmental impacts among competing products or services. For example, would the reduced energy requirements of one product be more important than the water pollution reductions associated with the use of a competing product? The ideal option would be a product that optimized energy efficiency and minimized water pollution. When this is not possible, however, Executive agency personnel will have to choose between the two attributes. It is important to consider both the nature of the environmental impact and the degree of difference among competing products.

There is no widely accepted hierarchy that ranks the attributes or environmental impacts that are most important. The following three factors are intended to help Executive agency personnel analyze the environmental impacts of competing products and services and make decisions about environmental preferability when faced with trade-offs among environmental attributes. These factors are not listed in order of importance.

a. Recovery time and geographic scale - Federal agencies should consider recovery time and geographic scale in comparing environmental impacts. To what extent is an environmental impact reversible? An impact is less acceptable if the recovery time is longer. The geographic scale of the problem and the importance of the affected ecosystems are also significant. Global environmental impacts are more significant, therefore, than ecological stressors that have a local or regional ecosystem impact.3

The table shown below provides a basic framework for considering the reversibility and geographical scale of environmental impacts and includes some examples of how certain impacts might fit into the matrix.

While some environmental standards or other sources of comparative information on products are national or international in scope, Federal agencies should also be prepared to consider unique local impacts and site-specific uses. Information based on an assessment of national or global needs, by its nature, rarely allows for the consideration of local impacts associated with how products are used, recycled, and/or discarded. Executive agency personnel are encouraged to consider local factors, where they are relevant, and not rely exclusively on national or global information. For example, although it may be generally accepted that an aqueous-based degreaser is preferred over a halogenated solvent degreaser, the environmentally preferable purchasing decision may depend on whether there is sufficient local wastewater treatment capacity to deal with the aqueous waste,

There may be rare occasions where the goal of minimizing a local impact, such as smog, is in conflict with the goal of minimizing a global impact, such as ozone depletion and global climate change. In these instances, EPA encourages purchasers to engage as much as possible in applying Principle #2 and aiming to prevent pollution, thereby avoiding such trade-offs. Where there are unique local circumstances, the purchaser can make the

judgment that the local conditions and impacts should be given priority.

#### **ECOLOGICAL PRIORITY IMPACTS MATRIX**

	Reversibility				
	l	Years	Decades	Centuries/ Indefinite	
·	Local/ Regional	Erosion Conventional Pollutants			
Geographic Scale	National	Hazardous Air Pollutants Chemical Releases	Bioaccumulative Pollutants		
	Global			Loss of Biodiversity Ozone Depleting Chemicals Global Warming Gases	

++ This matrix provides a few examples of how certain environmental stressors and impacts might fall into the different categories of reversibility and geographic scale considerations and is not meant to be comprehensive.

b. Differences among competing products - In some situations, a purchaser may determine preferability by looking at the differences of environmental performance among competing products, rather than by comparing environmental problems. Guiding Principle 3 addresses the Importance of identifying relevant attributes for a product. There might be significant differences among competing products for some of these attributes, while for others, the differences could be minimal. In purchase comparisons, Executive agencies might prefer the product or service that provides a significant improvement over competing products, without making a determination that one environmental problem is more significant than another. For example, a product that significantly reduces toxicity might be preferable to one that makes a minimal reduction in waste reduction.

c. Human health - A product or a service should be at least equivalent to comparable products/services in protecting human health to be considered environmentally preferable. EPA's Science Advisory Board listed the environmental factors listed to the right as significant contributors to human health risks.

> List of High Priority Human Health Stressors

#### (not in any order of importance):

- Ambient air poliutants
- Hazardous air pollutants
   Indoor air pollution
- Occupational exposure to chemicals
- Bioaccumulative pollutants

EPA recognizes that Executive agencies considering these three factors (recovery time and geographic scale; differences among products; and human health) must rely on providers of products and services to supply practical environmental information on products. EPA encourages organizations that provide environmental standards or other types of comparative product information to consider these factors in evaluating and reporting environmental information for purchasers.

# Guiding Principle 5: Environmental Performance Information

Comprehensive, accurate, and meaningful information about the environmental performance of products or services is necessary in order to determine environmental preferability.

a. Importance of Environmental Information — Executive agency personnel will need comprehensive, accurate and meaningful life cycle-based information about the environmental characteristics of products and services in order to evaluate whether one product or service is more or less damaging than another. Even with this thorough information, however, making these evaluations can be difficult. Yet, without such information, determinations of environmental preferability are even more challenging. Executive agency personnel are encouraged to seek, and product and service providers are encouraged to provide, life cycle-based information about the environmental performance of products and services. This information should be sought and provided in all appropriate stages of the acquisition process including, but not limited to market surveys, request for proposals, etc. (See Federal Acquisition Regulation, (FAR) 48 C.F.R. Subpart 23.7, which includes a mandate for the acquisition of environmentally preferable and energy-efficient products and services.

Executive agency purchasers may encourage product and service providers to describe their product or service's performance according to the menu of environmental attributes included in Appendix B (1).

Product and service providers' disclosure of environmental information about their products and services will also foster competition and encourage a market-driven approach to environmental improvement. The accessibility of the information to the public (both Executive agency personnel and the general public) will help ensure its accuracy and credibility.

b. What/How Information is Conveyed - A number of resources about the environmental performance of products or services are currently available. Two general categories of information sources can be distinguished: (1) manufacturers who provide environmental information (e.g., environmental claims, product profiles, etc.) about their products either on the label or through product literature, including advertisements; and (2) environmental information compiled, evaluated, and reported by non-governmental entities. Included in this second category are third-party certification programs that evaluate the environmental

aspects of products and award symbols (e.g., "seals-of-approval") or compile "report cards" of environmental information. Non-governmental entities may also verify specific claims made by manufacturers (e.g., paper contains 30 percent recycled content).

Information conveyed through claims and seals can help Executive agency personnel identify environmentally preferable products, depending on the types of products being purchased and the legal acquisition requirements involved. A more detailed discussion of how Executive agencies can use technical expertise and research of non-governmental entities in their environmentally preferable purchasing practices is included in Section V and Appendix D. In evaluating the environmental attribute claims made by anyone, whether they are manufacturers, vendors, or other non-governmental entities, Executive agency personnel should refer to the Federal Trade Commission's (FTC's) "Guides for the Use of Environmental Marketing Terms." (Green Guides.)

#### V. Executive Agency Implementation

This section recommends steps that each agency can take to implement the environmentally preferable purchasing provisions of EO 13101.

## A. Policy directive and affirmative procurement plans

Recognizing that effective implementation of environmentally preferable purchasing will require clear direction and support from the top levels of each agency, this Final Guidance recommends that each Executive agency issue a Policy Directive promoting the practice. A sample is included in Appendix C. The policy directive should include the elements listed below:

### An overall statement of policy:

- Agency personnel should seek to reduce the environmental damages associated with their purchases by increasing their acquisition of environmentally preferable products and services to the extent feasible, consistent with price, performance, availability, and safety considerations.
- Environmental factors should be taken into account as early as possible in the
  acquisition planning and decision-making process. (See EO 13101, Section 401.)
- Responsibility for environmentally preferable purchasing should be shared among the program, acquisition, and procurement personnel.

## A commitment to the following:

- Increasing the acquisition of environmentally preferable products and services. (See EO 13101, Sections 102, 503 (c), and 602.)
- Under section 6002 of the Resource Conservation and Recovery Act of 1976 and FAR Subpart 23.4, procuring agencies are required to establish affirmative procurement programs for purchasing EPA-designated recycled products. EPA recommends that agencies expand the scope of their affirmative procurement programs to include environmentally preferable products and services. EO 13101, Section 302, (a)(1)(a) calls for a Strategic Plan to include the "direction and initiatives for acquisition of recycled and recyclable products and environmentally preferable products and services." Furthermore, Section 302 (b) (1) requires Agency Environmental

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Executives to "translate [this] Government-wide Strategic Plan Into specific agency and service plans."

- Identifying and implementing pilot projects (See Section V (B) below).
- Establishing internal agency incentive and award programs to recognize those people, teams, and interagency work groups who are most successful at promoting the purchase of environmentally preferable purchasing (see Executive Order 13101, Section 802). Collaboration among agencies to provide education and training is highly encouraged.

In order to minimize the burden on Executive agencies, EPA recommends that each agency incorporate in its Policy Directive to promote environmentally preferable purchasing into its Affirmative Procurement and Strategic Plans. This incorporation can transpire as agencies revise their plans. Agencies should ensure that their Policy Directive is made available to the field-level procurement and environmental personnel.

#### **B. Pilot Projects**

Section 503 (b) of EO 13101 states "[A]gencies are encouraged to immediately test and evaluate the principles and concepts contained in the EPA's Guidance on the Acquisition of Environmentally Preferable Products and Services through pilot projects to provide practical information to the EPA for further updating of the guidance." Furthermore, Section 704 states "Each executive agency shall establish a model demonstration program. . . to demonstrate and test new and innovative approaches such as incorporating environmentally preferable... products...." into model facility programs. To help Executive agencies implement these provisions of the EO, this Final Guidance includes some suggested steps for initiating and implementing pilot acquisitions.

The suggestions that follow are based on lessons from early pilots undertaken by the General Services Administration and the Department of Defense in partnership with EPA. Case studies from these and other pilot projects are available from the Pollution Prevention Information Clearinghouse (202 260-1023) or they can be accessed through EPA's EPP Program Web site.

Additional pilot acquisitions will be important testing grounds for applying the guiding principles and testing their applicability. The pilots will also provide valuable information for the development of tools and resources to facilitate widespread adoption of environmentally preferable purchasing practices.

EPA will track pilots that are planned or already underway on the EPP Web site, providing a clearinghouse for information on government-wide activities related to environmentally preferable purchasing. (See EO 13101, Section 503 (b)(4).) EPA will disseminate information about different pilots among the agencies through the EPP Web site, updates, and fact sheets to ensure that lessons learned are shared and used to inform other pilot projects.

The discussion below further describes how these pilots and demonstration projects might proceed. EPA encourages Executive agencies to undertake pilots and use all existing sources of information and technical expertise to carry them out. EPA is committed to supporting these pilots and providing overall coordination and technical assistance, as resources allow.

 Selection of pilots. Selection of pilot acquisitions is at the discretion of the individual Executive agencies. There are at least two options for how agencies can approach this selection process. First, an agency may want to identify an environmental problem that it wants or needs to address. Once the problem has been identified, the agency can develop a list of products and services that contribute to that specific environmental problem. Alternatively, an agency may start out with a product or service category for which it wants to find alternatives. In either case, criteria that agencies might wish to consider in selecting pilot acquisitions include:

- Potential for a reduction in risk to human health and the environment.
- Status on EPA's prioritized list. Pursuant to EO 13101, Section 503 (a), and in order
  to assist Executive agencies focus their efforts on minimizing serious environmental
  impacts, EPA has developed a prioritized list of the top 20 product categories. The
  complete list, along with a discussion of the methodology used in its development can
  be found in EPA's EPP Web site.
- Existence of less harmful product or service alternatives. Alternatives could vary anywhere along the product or services' life cycle, for example, different ways of manufacturing or disposing. Alternatives might also include different ways of getting the same result, even if it means acquiring a completely different type of product or service.
- · Feasibility/degree of flexibility in the acquisition.
- Products or services that are widely used within the Federal government and are representative or typical of the procurement system. This maximizes the pilot's potential value to others by providing lessons about the effectiveness of the guidance and increasing the likelihood that the pilot could be replicated. (See EO 13101, Section 503 (b) (1).)
- 2. Implementation of pilot projects. In implementing the pilot projects, Executive agencies can look to the process and results of projects others have completed or develop a different approach for environmentally preferable purchasing. In undertaking the pilots, agencies are encouraged to:
  - Ensure the participation of environmental and procurement experts.
     Use all of the options available to them to determine the environmentally preferable attributes of products and services in their pilot projects, including the technical expertise of non-governmental entities. This is pursuant to EO 13101, Section 503 (b) (2). More specific guidance on the use of non-governmental entities is included in Appendix D.

Once a product or service has been chosen, pilots typically involve:

- Determining environmentally preferable products and services. This can be accomplished by Executive agencies:
  - Identifying product attributes that can serve as indicators of environmental preferability. Agencies can look to Appendix B for a menu of attributes.
     Selection of attributes should be tied to the most significant environmental problems or impacts.
  - Collecting information from product and service providers. This may require the development of contract language to ensure that yendors provide environmental information.

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- With the recent changes to the FAR and the trend toward best value contracting, agencies can now more easily consider environmental factors when making purchasing decisions. However, environmental information is often not provided by vendors. Thus, it may be necessary for Executive agency personnel to clearly request or require relevant environmental information from vendors in market surveys and proposals whenever appropriate.
- · Evaluating the environmental information.
- b. Incorporating results of the environmental information research into the acquisition process to purchase environmentally preferable products and services. While the acquisition strategy and method are determined by the purchasing agency, EPA asks that agencies select a strategy that:
  - Maximizes the number of environmentally preferable product or service choices available to the purchasing agency.
     Promotes competition across products and services in terms of environmental performance.
  - Stimulates product and service process innovation and continuous improvement.
  - Allows for the consideration of local environmental conditions.
     Promotes a definition of environmentally preferable products and services that can improve over time.
- c. Documenting the pilot effort, including a description of how the project was initiated and implemented and the lessons learned. A sample case study template is attached in Appendix E and is also available on EPA's EPP Web site. The results of pilot projects will be shared among Executive agencies through EPA's EPP Web site.

More specific information about pilot implementation will be made available through a variety of tools that EPA currently is developing including: an interactive training module; a "best practices guide" with examples of specific contract language that have been used by purchasing agencies; and a database of existing environmental standards that have been developed by governmental and non-governmental entities.

Section 12(d) of The National Technology Transfer and Advancement Act of 1995 (NTTAA) (Pub. L. 104-113, §12(d), 15 U.S.C. 272 note) and OMB Circular A-119 (63 R8546, February 19, 1998) direct Federal agencies to use both domestic and international voluntary consensus standards in lieu of government-unique standards in their procurement and regulatory activities, except where it would be inconsistent with applicable law or otherwise impractical. The Act's purpose is to reduce the cost of procurement and regulation by requiring a Federal agency to draw upon any suitable technical standard already used in commerce or industry rather than inventing a new standard. Some of those standards might relate to evaluating environmental performance and measuring the environmental attributes of products or services. In establishing Environmental Preferable Purchasing pilot projects or planning other environmentally-sensitive activities, agencies should first determine whether there is an applicable voluntary consensus standard that would meet its needs.

The NTTAA also requires a Federal agency, when it is consistent with the agency's mission, authorities, priorities, and budget resources, to participate in the standards-setting activities

of voluntary consensus standards bodies. Such participation helps ensure the development of standards that meet the agency's needs, including those related to Environmental Preferable Purchasing concerns. This collaboration can also promote national goals and objectives. OMB Circular A-119 specifically mentions the need to promote the use of environmentally sound and energy-efficient materials, products, systems, services, or practices as well as the improvement of public health and safety. (See OMB A-119, Section 7a.)

In the long run, institutionalizing the purchase of environmentally preferable products and services requires that Executive agencies continue their efforts after the pilot's are completed. Given that environmental information about products and services is still scarce, agencies should rely on all sources of information and technical expertise in making determinations about environmental preferability. To foster agencies continue acquisition of "green" products, EPA will coordinate the development and standardization of environmental information about potential product and service categories for future pilots. This effort will consist of identifying environmental performance characteristics and measurement methods and will involve technical experts both inside and outside the Federal government. Executive agencies should examine all information generated through these types of efforts. The agencies, and not the nongovernmental entities, must make all final determinations regarding environmental preferability.

The experience gained from Executive agency pilots will be key in determining the scope and nature of EPA's long-term activities to advance Federal environmentally preferable purchasing. The lessons learned and partnerships formed from these pilots will help establish a broader infrastructure to support this initiative. EPA might use existing mechanisms or help develop new resources such as guidance, networks, and databases in support of the Federal purchasing community— to build this infrastructure. The infrastructure will help bridge the gap between the environmental and procurement expertise within the Executive agencies,

All Executive agency personnel will have a role in creating a demand for environmentally preferable products and services. Thus, the infrastructure will also have to support the development of tools that are easy and convenient for general and diverse use.

In light of the evolving acquisition landscape and the dynamic nature of the marketplace, the infrastructure will have to be flexible. In the increased globalization of the economy and trends toward commercialization of the Federal marketplace, will also require agencies to coordinate this initiative with new international trade and standardization developments. Ultimately, the measure of this initiative's success will be in the increased availability and purchase of products and services that pose fewer adverse impacts on human health and the environment.

## Footnotes

- 1. U.S. Congress, Office of Technology Assessment, Green products by Design: Choices for a Cleaner Environment, OTA-E-541 (Washington, D.C. U.S. Government Printing Office, October 1992) [Back to text]
- 2. This is based on the findings of the Science Advisory Board, published in its 1990 report entitled "Reducing Risk: Setting Priorities and Strategies for Environmental Protection," a statement of policy on priority pollutants affecting environmental and public health. In this report, environmental stressors were judged to be significant based on two primary criteriathe geographic scale and degree of reversibility of the impact.

The Science Advisory Board is a public advisory group providing extramural scientific

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information and advice to the Administrator and other officials of the Environmental Protection Agency. The Board is structured to provide balanced, expert assessment of scientific matters related to problems facing the Agency. [Back to text]

3. Refer to above footnote. [Back to text]

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## http://www.epa.gov/epp/tools/creditcard.htm Environmentally Preferable Purchasing (EPP)

You are here: EPA Home Prevention. Pesticides & Toxic Substances Pollution Prevention
Environmentally Preferable Purchasing Publications Other Related Publications Tips
Buying "Green" with the Government Credit Card

## Tips for Buying "Green" with the Government **Credit Card**

As published by the EPA in January 2000.

Assuring that your purchases comply with environmental laws and EPA's policies.

You have the opportunity to help the environment while buying products that meet your program's needs. President Clinton has directed federal agencies to buy products that are made with recycled content, have less packaging, are energy efficient, don't create hazardous waste, and incorporate other environmentally preferable attributes. As you use the government credit card, you can help EPA meet this commitment.

### Here's how:

- Buy products with recycled content Buy products with reduced packaging
- Look for the Energy Star label
  - Ask if the product contains hazardous materials or toxic chemicals Look for other information on the environmental features of products

## Content

EPA designates recycled content products that government agencies must buy. For products which have been designated by EPA, you must buy those which contain recycled content as long as they are available, meet your performance needs, and are cost-competitive. EPA recommends the required minimum percentage of recycled content that the products you buy should contain. A table of recycled content percentages as of 1/19/00 is included in this

Whatever your job, it is likely that you will be asked to order a product which has been designated by EPA. Supply Clerks, Secretaries and Administrative Officers order copy paper, file folders, remanufactured toner cartridges, writing tablets, envelopes, plastic office supplies, shipping and mailing products, awards and plaques, and other products we typically use every day. Fleet managers and users of fleet vehicles purchase automotive products like motor oil, tires, and engine coolant. On-Scene Coordinators may buy spill containment products. Employees in Facilities or Safety and Environmental Compliance may buy signs, pallets, parking stops, traffic cones and barrels to control traffic flow in our parking lots, park benches and picnic tables, and certain other building and landscaping products. All of these products can be made with recycled content and you can find most of them in the General Services Administration's (GSA) "Environmental Products Guide" EXIT Disclaimer Manufacturers, suppliers, and helpful national specifications can also be identified at EPA's Comprehensive Procurement Guidelines Web site.

Tips for Buying "Green" with the Government Credit Card | Environmentally Preferable ... Page 2 of 4

## Terminology ...

Recycled content products contain "recovered materials" or "postconsumer materials" or both. "Recovered materials" means materials that have been removed or diverted from solid waste in other words, trash - including solid waste created by manufacturers. "Postconsumer materials" are materials that we discard at home and at work that are separated or diverted for recycling instead of going to a landfill.

In the case of paper products, President Clinton requires Federal agencies to purchase products containing 30% postconsumer material beginning January 1, 1999. Paper products containing 30% postconsumer materials will be available from GSA's schedule and stock programs.

## Reduced Packaging

Packaging is a significant solid waste problem. EPA estimates that packaging alone accounted for 23.7 % of the volume and 19.4% of the weight of the material that went to municipal landfills in 1996. We can reduce the amount of trash we generate by buying products with reduced packaging. For example, if you can purchase pads of paper that are not wrapped in plastic shrink wrap, you will not have to throw away the plastic. Also consider buying a larger quantity packaged in a single box rather than smaller quantities in multiple boxes.

## **Energy Efficiency**

When buying products that use energy (computers, copiers, fax machines, multitasking devices, document scanners, TV/VCRs, refrigerators, etc.), look for the Energy Star label, which tells you that the product is energy efficient. Check EPA's Energy Star Products web site at or call the Department of Energy's Federal Energy Management Program for the latest recommended levels of energy efficiency for different products - 1-800-DOE-EREC or 1-800-363-3632. Federalter.com, an e-commerce site that you can purchase a variety of goods and services through, will identify and allow you to purchase the EnergyStar product options available to you. Indicate that you want to see EnergyStar products via their Search section, or look at the "EnergyStar compliant" column in the "Compare Products" section of their site.

## **Hazardous Materials and Toxic Chemicals**

Ask if the product contains hazardous materials or toxic chemicals. Examples include cleaning products containing petroleum-based solvents or acids, and paints (some contain chromate or volatile organic compounds). GSA's "Environmental Products Guide" includes information provided by vendors to help you choose a more environmentally preferable alternative to many of these products.

Battery-operated portable electronic devices such as cell phones, laptop computers, walkie-talkies, and tools often use rechargeable Ni-Cd batteries which contain cadmium, a hazardous material. If you buy products with Ni-Cd batteries, ask for batteries with the Battery Recycling Seal (see graphic).

Advise the person who will be using the product that Ni-Cd batteries must be recycled at the end of their useful life so they don't end up in a landfill. They should contact their

..19

Tips for Buying "Green" with the Government Credit Card | Environmentally Preferable ... Page 3 of 4

safety/environmental compliance manager for assistance. Information for consumers on how and where to recycle their used Ni-Cd batteries is also available through a toli-free number: 1-800-822-8837.

There are other situations where you may have to buy products with hazardous materials, such as laboratory chemicals. Notify your facility safety or environmental compliance manager before you purchase the item. If this is a new chemical at the facility, they may require you to get a Material Safety Data Sheet. Or there may be special worker safety, recycling or disposal procedures that you will need to follow.

In summary, when buying products, consider the following environmental criteria:

- Minimize Heavy metals (e.g. lead, mercury,
- cadmium)
  ne depleting chlorinated compounds
- (e.g. CPCs)
  Organic solvents (e.g. chlorinated and
- aromatichydrocarbons Reactivity, corrosiveness, flammability,
- intitationnobential
- Carcinogens, mutagens, teratogens

  \* Acute and chronic toxicity

  \* Substancias that can blooccumulate

- Votatile organic compounds (VOCs)

  \* Phosphorous

## Favor

- Reusability/repairability
- \* Reduction in packaging
- \* Energy Efficiency

  \* Use of renewable energy seurces
- \* Biodegradability upon disp

A good source for this information is EPA's Environmentally Preferable Purchasing Program's Database of environmental information on products and services.. In addition, vendors are often happy to provide this information on their products.

## Resources to help you make more environmentally preferable purchasing choices:

Listed below are some website addresses and telephone numbers of selected vendors that offer products with good environmental features. The following also references resources containing general green purchasing and product information. (Of course, this is not an exhaustive list of companies and EPA in no way endorses their products.)

## **Environmental Office Products**

## Buy Green Homepage EXIT Disclaimer

Provides links to numerous resources.

Rainbow Eco Specialties -- Carriers of the National Recycling Coalition Recycled Content Product Line

1-800-842-0527

Office and school supplies including recycled-content products, agricultural-based products, solar products, and less toxic products

## Green Earth Office Supply EXIT Disclaimer

1-800-327-8449

Its product offerings include recycled-content products, agricultural based products, solar products, less toxic products and cruelty-free products.

Ecomali Office Products EXIT Displaimer

http://www.epa.gov/epp/tools/creditcard.htm

Tips for Buying "Green" with the Government Credit Card | Environmentally Preferable ... Page 4 of 4

Ecomali contains links to sites that sell traditional office products with recycled content, high quality recycled diskettes, energy-efficient lighting products, etc.

Full Circle Paper Outlet EXIT Disolaimer (919) 309-0811

Green Office Information/ Buying Guides

Working Your Way to a Green Office EXT DISCHEMENT.

General product information, product list, as well as green buying information

(202) 331-7337 Office Green Buying Guide

Green Office Magazine 1-800-709-0012 E-mail: greenoffice@msn.com Office Furniture information.

\*\*\*Product attribute claims should be carefully examined to make sure they are consistent with the Federal Trade Commission's (FTC) Guides for the Use of Environmental Marketing Claims. In general, be skeptical of broad claims that the product is "environmentally safe," "environmentally friendly" or "non-toxic" unless the manufacturer can back up the claim with actual documentation. The EPP Web site has a helpful <u>brochure describing the FTC guidelines</u>. There you will also find many examples of advertising language to help you understand how to evaluate advertising claims.

## Comprehensive Procurement Guidelines (This section was updated in April 2008.)

EPA's CPG program provides recycled-content recommendations for lists of designated products. EPA has already designated or is proposing to designate products grouped into the following eight categories:

- Construction Products
  Landscaping Products
  Nonpaper Office Products
  Paper and Paper Products
  Park and Recreation Products
- Transportation Products Vehicular Products
- Miscellaneous Products

## INSTRUCTIONS FOR IMPLEMENTING EXECUTIVE ORDER 13423

"Strengthening Federal Environmental, Energy, and Transportation Management"

March 29, 2007

## I. Introduction

The Federal government has made significant progress in improving environmental and energy performance through a series of executive orders, Memoranda of Understanding, and other guidance. Executive Order 13423 (E.O.), Strengthening Federal Environmental, Energy, and Transportation Management, intends to build on that body of work and success by integrating and updating prior practices and requirements into a cohesive, strategic approach to further ensure enhanced performance and compliance with statutory and other legal requirements.

Section 2 of the E.O. directs Federal agencies to implement sustainable practices for:

- Energy efficiency and reductions in greenhouse gas emissions.
- Use of renewable energy.
- Reduction in water consumption intensity.
- Acquisition of green products and services.
- Pollution prevention, including reduction or elimination of the use of toxic and hazardous chemicals and materials.
  - Cost-effective waste prevention and recycling programs.
  - Increased diversion of solid waste.
- Sustainable design/high performance buildings.
- Vehicle fleet management, including the use of alternative fuel vehicles and alternative fuels and the further reduction of petroleum consumption.
- · Electronics stewardship.

## A. Purpose

The purpose of this document is to define agency requirements for implementing E.O. 13423 and to define broad strategies for achieving them. This document is the first of such E.O. implementing instructions. In order to ensure effective and efficient implementation, and to meet the goals and objectives of the E.O., it is mandatory that executive departments and agencies implement the activities described in these instructions in accordance with Sections 1, 2, 3, and 4(b) of the E.O.

## B. Authority

These instructions are issued under the authority of Section 4(b) of the E.O. This section authorizes the Chairman of the Council on Environmental Quality (CEQ) to issue instructions on implementing the E.O. after consultation with the Director of the Office of Management and Budget (OMB) and the interagency Steering Committee.

## C. Organization and Oversight

The organizational structure of the entities established to coordinate and oversee implementation of E.O. 13423 is shown in Figure 1. The organizational structure as well as the roles and responsibilities of each entity are described below.

- Recycled content products designated in EPA's Comprehensive Procurement Guidelines.
- Energy Star® products identified by DOE and EPA, as well as FEMP-designated energy-efficient products.
- Water-efficient products, including those meeting EPA's WaterSense standards.
- · Energy from renewable sources.
- Biobased products designated by the U.S. Department of Agriculture in the BioPreferred program.
- Environmentally preferable products and services, including EPEAT-registered electronic products.
- Alternative fuel vehicles and alternative fuels required by EPAct.
- Products with low or no toxic or hazardous constituents, consistent with section VIII.A of these instructions.
- Non-ozone depleting substances, as identified in EPA's Significant New Alternatives Program.

## C. Green Products Standards, Coordination, and Review

(1) Minimum Content Standard for Printing and Writing Paper. Each agency shall continue to use the following minimum content standards when purchasing printing and writing papers, including office paper products, or support services that include the supply of written documents:

- · 30 percent postconsumer fiber.
- 20 percent postconsumer fiber, IF papers containing 30 percent postconsumer fiber are not reasonably available, do not meet reasonable performance requirements, or are only available at an unreasonable price.

EPA shall review the recommended content levels for printing and writing papers in the existing Paper Products Recovered Materials Advisory Notice and adjust the recommendations, where appropriate. EPA shall report its decisions to the FEE.

(2) Review of Commehensive Procurement Guidelines. EPA shall review existing product designations in the Comprehensive Procurement Guidelines for effectiveness, obsolescence, and consistency with the biobased products designation program, environmentally preferable purchasing program, and Energy Star® and FEMP-designated energy efficient products program. EPA shall delete those designations that are ineffective in meeting the objectives of the Resource Conservation and Recovery Act section 6002 or are obsolete due to market changes.

(3) Environmentally Preferable Products and Services. Each agency shall purchase environmentally preferable products and services, using EPA's Guidance on the Acquisition of Environmentally Preferable Products and Services<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> For EPA's guidance, go to http://www.epa.gov/epp/pubs/guidance

## VIII. Pollution Prevention and Management of Toxic and Hazardous Materials

E.O. 13423, Sec. 2(e): In implementing the policy set forth in section 1 of this order, the head of each agency shall:

(e) ensure that the agency (1) reduces the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the agency, (ii) increases diversion of solid waste as appropriate, and (iii) maintains costeffective waste prevention and recycling programs in its facilities.

Sec. 3(a), excerpted, (e), and (f): In implementing the policy set forth in section 1 of this order, the head of each agency shall:

(a) implement within the agency sustainable practices for... (v) pollution and waste prevention and recycling, (vi) reduction or elimination of acquisition and use of toxic or hazardous chemicals...

(e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;

(f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the agency's compliance with this order.

Technical Lead: EPA

Workgroup: Interagency Environmental Leadership Workgroup

## A. Goels and Plans for Toxic and Hazardons Chemicals

No later than January 24, 2008, each agency, at all appropriate organizational levels including appropriate facilities, organizations, and acquisition activities, shall develop written goals and support actions to identify and reduce the release and use of toxic and hazardous chemicals and materials, including toxic chemicals, hazardous substances, ozone-depleting substances (ODSs), and other pollutants that may result in significant harm to human health or the environment.

In identifying the list of toxic chemicals, hazardous substances, and other pollutants, each agency shall consider.

- · Quantity of the chemical or material in use by the agency.
- Human and/or environmental toxicity of the chemical.
- Potential for human and/or environmental exposure to the chemical or material.

- Potential harm to the environment associated with the use or release of the chemical or material, including impacts to air quality, surface water, groundwater, soils/land, and climate systems.
- · Persistence of the chemical in the environment.
- Availability of controls to manage identifiable risks.
- Impacts on mission capability and business costs.
- Existing environmental hazard lists such as priority chemicals identified by EPA's Resource Conservation Challenge, and any agency-specific toxic or hazardous chemicals lists.
- The available substitutes for ODSs identified by EPA's Significant New Alternatives Policy Program.
- Contaminants identified by the U.S. Geological Survey as part of its National Reconnaissance of Emerging Contaminants.<sup>4</sup>
- Where appropriate, regional- and watershed-based environmental improvement efforts such as the Chesapeake Bay Prioritized Chemicals of Concern Program, the Great Lakes Bi-national Strategy or local watershed efforts.

## B. Ozone-Depleting Substances

(1) Alternatives. Each agency shall ensure that it maximizes the use of safe alternatives to ODSs, as approved by the EPA's Significant New Alternatives Policy (SNAP) program.

(2) Agency plans. Agency plans to replace ODSs should target cost effective reduction of environmental risk by eliminating the use of ODSs in new equipment and facilities and by phasing out ODS applications as the existing equipment using those substances reaches its expected service life. In developing ODS-related actions, agencies shall consider (1) maintaining equipment to prevent or fix leaks and (2) replacing leaking equipment when repair is no longer cost-effective or where it is life-cycle cost-effective to replace the equipment.

(3) Revision of personal property management policies. Each agency shall amend its personal property management policies and procedures to preclude the disposal of ODSs removed or reclaimed from its facilities or equipment, including disposal as part of a contract, trade, or donation, without prior coordination with the Department of Defense (DoD).

(4) Transfer to DoD. Where the recovered ODS is a critical requirement for DoD missions, the agency shall transfer the materials to DoD. DoD will bear the costs of such transfer.

<sup>&</sup>lt;sup>4</sup> The national reconnaissance is an on-going initiative to track contaminants commonly derived from wastewater sources and found to be present in the environment on a global scale. A list of target compounds identified as emerging contaminants can be found at <a href="https://ioxics.usgs.gov/regional/contaminants.html">https://ioxics.usgs.gov/regional/contaminants.html</a>.

## C. Compliance with the Emergency Planning and Community Right-to-Knew Act and the Pollution Progention Act

(1) EPCRA reporting. As part of managing toxic and hazardous chemicals as required by sections 2(e)(i) and 3(a)(vi) of the E.O. and meeting the reporting requirements of section 3(g) of the E.O., each agency shall continue to comply with the provisions set forth in sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA), section 6607 of the Pollution Prevention Act (PPA), all implementing regulations, and future amendments to these authorities, in light of applicable EPA guidance and without regard to the Standard Industrial Classification (SIC) or North American Industrial Classification System (NAICS) delineations. Each agency reporting under EPCRA section 313 shall do so using Internet reporting as provided in EPA's EPCRA section 313 guidance.

(2) Contractor reporting. In addition, as required in section 3(e) of the E.O., in contracts providing for contractor performance at Federal facilities, each agency shall include a requirement that the contractor provide the information needed by the Federal facility to comply with EPCRA, PPA, and the E.O.

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## Section 2

## **Building Industry Market Expectations**

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Top Architectural Firm Introduces Radical Transparency to the Building Market	page 35
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Louisville Charter for Safer Chemicals (adopted by many within the healthcare sector)	page 44
New York Times, Energy & Environment, Products That Are Earth-and-Profit Friendly	nage 45

Communices Chapters Membership

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## Government Resources

USGBC is committed to supporting federal, state and local governments in their pursuit and development of green building programs and initiatives. Here, governments have access to best practices, lessons learned and other initiatives already in place across the country.

 Various LEED initiatives including legislation, executive orders, resolutions, orginances, policies, and initiatives are found in 45 states. including 202 localities (138 cities, 36 counties, and 28 towns), 34 state governments (including the Commonwealth of Puerto Rico), 14 federal agencies or departments, 17 public school jurisdictions, and 41 institutions of higher education across the United States. (12/01:09) \$86.

Government owned or occupied LEED buildings make up 30% of all LEED projects. The federal government has 200 certified projects and another 3296 pursuing certification. State governments have 353 certified projects and 1989 pursuing certification. Local governments have 520 certified projects and 3117 pursuing certification. (2/16/10)

## Featured Highlight

**GREEN BUILDINGS** 

U.S. Green Building Council has partnered with the Sterra Club's Cool Cities Campaign to connect USGBC's nearly 80 chapters with the more than 200 local Cool Cities campaigns to encourage the adoption of effective, tried-and-tested green building policies at the local level. An important tool in this joint effort is the joint policy recommendations guide. Join us by connecting with /div (603) USGBC chapter and rour rocal Cool Cities campaign. Lervin more about the partnership -

. Isac the Local Policy Guide »

### GREEN ECONOMY

Opportunities for green building following the American Recovery and Remyestment Act.

### **DEVELOP A Green Building Program**

A forum for sharing and developing paer resources for Government green. building programs.

## IMPLEMENT the LEED Rating System

Resources for implementing LESO in the Government Sector find case studies and research Learn about the USCEC Fortfolio Program.

## CONNECT to the Government Community

Link to the USGBC Government Community, Find peer-to-peer forums and valuateer warking groups.

### DISCOVER Innovative Policy Solutions

Search the Public Policy Database; Learn about public policies that affect green building, suppossifitings/entiment initiatives and incentives on green building. Help resp USGEC up-to-case on policies in your area. Dentil us

### MEASURE Sustainability

A national consensus-based framework for gauging the sustainability and



## Pilot Credit 2: PBT Source Reduction: Dioxins and Halogenated Organic Compounds

This credit is available for pilot testing by the following LEED project types:

- New Construction
- . Core and Shell
- Schools
- Commercial Interiors

To reduce the release of persistent blooccumulative toxic chemicals (PBTs) associated with the life cycle of building materiels.

- Use materials manufactured without added halogenated organic compounds<sup>1</sup> for at least 75% (by cost) of the material totals in a minimum of three of the following four groups:
  - . Exterior components (including at a minimum, roof membranes, waterproofing membranes, window and door frames, siding).
  - Interior finishes (including at a minimum, flooring, base, ceiling tiles, wall coverings, and window treatments).
  - Piping, conduit and electrical boxes.
  - Building-installed electrical cable and wire jacketing.
- Haiogenated organic compounds covered in this credit include the following:

  - All plastics containing chlorine or fluorine including:
    Chlorinated polyethylene (CPE)
    Chlorinated polyethyl chloride (CPVC)
    Chlorosutfonated polyethylene (CSPE)
    Polyethylene (CR or chloroprene rubber, also brand name Neoprene)
    Polyethyl chloride (PVC)
    Fluorinated ethylene propylene (FEP)
  - All brominated or halogenated flame retardants (BFRs and HFRs) containing bromine, chlorine, or fluorine including:
    PBDEs (polybrominated diphenyl ether), including Deca-BDE (Decabromodiphenyl ether),
    Tetrabromobisphenol-A (TBBPA)
    Hexabromocyclododecane (HBCD)
    Tris(2-chloroisopropyl) phosphate (TCPP),
    Tris(2-chloroisopropyl) phosphate (TCPP)
    Dechlorane Plus
- Compounds that constitute less than five percent of the product by weight, are exempt from complying with the credit requirements, with the exception of halogeneted

# LEED Pilot Credit Library

flame retardants (HFRs), including, but not limited to, Polybrominated Diphenyl Ethers (PBDEs) which have no minimum threshold.

## Potential Technologies & Strategies

While compounds representing less than 5% of the product weight are not required to comply with the credit requirements (with the exception of HFRs), specification and procurement of halogen-free minor parts is encouraged when meet or exceed performance requirements.

Consider materials free of added chlorine or other halogens in all applications which meet or exceed performance requirements. Options of materials with reduced PBTs include, but are not limited to, TPO, FPO, EPDM, and ABB or SBS modified bitumen for roof membranes; natural linoleum, rubber, or alternate polymers for flooring and surfacing; natural fibers, polyethylene, polyester and paint for well covering; polyethylene for wire & cable jacketing; wood, fiberglass, HDPE, and aluminum with thermal breaks for windows; steel, HDPE and fiberglass for conduit, and copper, steel, concrete, clay, polypropylene and HDPE for piping. Cast iron pipe should be avoided based on air quality concerns associated with manufacturing practices (see TSAC PVC report).

Confirm that halogenated flame retardants are not added to alternative plastic products. The fire retardant attributes of halogenated compounds should be replaced with inherently fire retardant design or atternative materials appropriate to the fire requirements of the product.

\*Heliogeneted organic compounds (or habourbone) addressed by this credit are made up of a heliogen element (specifically chlorins, bromter or itsofne) and certon. These compounds are targeted due to their persistence and propereity to close formation. Habopen salts, such as sodium relativists, which are formed with nested insisted of certon have different environmental and health performance characteristics and are not under the curriew of the certon.

## USGBC UPDATE

18,805 Members • 81,155 LEED APs

LEED Commercial (18,468 Registered - 2,384 Certified) Residential (8,993 Registered - 1,504 Certified)

Sign Up Jum UNLEC

## March 2009 Implementing the Economic Recovery Plan

USGBC is a resource in the work to ensure green building is a cornerstone of the new economy

As federal, state and local governments work together to rebuild and re-energize our economy through the economic recovery package, the U.S. Green Building Council is focused on supporting the implementation of the federal investment in green and energy-efficient building. Green building is among the comerstones of a clean energy economy. The building industry makes up 14.7% of U.S. GDP and uses 40% of our nation's energy. Greening our existing buildings would result in an estimated savings of \$160 billion in energy costs, while creating green jobs that can't be exported. And that's good news for our nation's economy, state and local government budgets, business bottom lines and the financial well-being of

While USGBC was front and center in advocating for an unprecedented commitment to green solutions in the economic stimulus package recently signed by President Obama, the next challenge is even more welcome; serving as a resource for USGBC members as they help their states and local communities realize the full economic and environment benefit of the American Recovery and Reinvestment Act of 2009.

We all have a stake in the new green economy, and professionals in every sector of the green building industry are well-positioned to play a part in the implementation of the federal stimulus plan. Some \$9 billion is designated to address public safety and other government services, which may include school modernization, renovation and repair consistent with a recognized green building rating system. For homes professionals, the Act provides \$5 billion for the federal Weatherization Assistance Program, which provides

### **USGBC Community**

Survey, What information do you need about LEED v3?
As USGBC prepares to launch LEED v3, we want to be sure you're getting the information you most need. Please take this brief survey to help us better address your needs.

Take survey a

## **Greenbuild Updates**

Present a workshop at Greenbuild 2009: USGBC's Education Provider Program is currently seeking proposals for green professional education workshops at Greenbuild 2009 in Phoenix.

Download the call for submittals (PDF) >

## Education Updates

New Green Building Besics & LEED online course: Don't miss the first step in building yout knowledge of USGBC, LEED and green building best practices.

Register today »

New LEED Core Curriculum Addresses LEED V3 and GBCl's New Credentials: Don't miss this first step in building your knowledge of USGBC, LEED and green building best

Learn more »

## Industry Events

Green Intelligent Buildings Conference Artington, Va., March 25-26. Early-bird registration through March 1.

Register today »

## USGBC UPDATE - March 2009

assistance to low-income families in weatherizing and improving the energy efficiency of their homes. It provides another \$4 billion for the Public Housing Capital Fund, which provides funds to public housing agencies nationwide for the development, funding and modernization of public housing developments. And firms and professionals working with commercial and institutional buildings can look to become involved with projects under the \$5.55 billion granted to the federal General Services Administration for federal buildings, including \$4.5 billion for measures to make GSA facilities "high-performance green buildings," as defined by the 2007 energy law.

USGBC is a resource for you to learn how to be a part of our nation's recovery.

- For Individuals and firms: Find information on finding a green job, using LEED Professional Accreditation and USGBC's educational offerings to position yourself as an indemand green worker, and the latest news and research on a green-built economy at <u>USGBC's green jobs</u> page.
   For local and state governments: Learn how to implement the economic stimulus plan at the <u>Green Economic Recovery</u> Resources page. USGBC has created tools for exploring the possibilities created by the stimulus plan and an upcorning
- The potential for green building to create new jobs is astounding: As many as 2 million jobs could be created under a green economic recovery plan envisioned by the Center for American Progress. In fact, according to an October 2008 report from the U.S. Conference of Mayors & Mayors Climate Protection Center, there were 750,000 green jobs in the U.S. economy in 2006 a number projected to grow to 4.2 million over the next 30 years. If we all play our part, 4.2 million can be an understatement, and green jobs will lie at the heart of America's economic revival.

Stimulus Plan Implementation webcast series.

In fact, research from diverse sources examining the interest in green buildings among a wide range of Americans paints the same picture: The future of our built environment clearly centers on energy efficiency, water reduction, systems that encourage cleaner indoor air, the use of recycled and more

 $http://communicate.usgbc.org/newsletters/USGBC\_Update/0309.html$ 



32 32010 sustainably developed materials, and communities that coexist with their environments. Across the country, Americans are recognizing that sustainability is key to a prosperous future, and the triple bottom line — environmental responsibility, economic prosperity and social equity — is imperative as we move forward.

- According to Turner Construction Company's "Green Building Barometer," 75% of commercial real estate executives – including developers, rental building owners, brokers, architects, engineers and others – say the credit crunch will not discourage them from building green. In fact, 83% said they would be "extremely" or "very" likely to seek LEED certification for buildings they are planning to build within the next three years.
  - 70% of homebuyers are more or much more inclined to
    buy a green home over a conventional home in a down
    housing market, according to McGraw-Hill
    Construction's 2008 SmartMarket Report, "The Green
    Home Consumer." That number is 78% for those
    earning less than \$50,000 a year, showing the
    increasing accessibility of green buildings to all
    members of our society. In fact, 56% of respondents
    who bought green homes in 2008 earn less than
    \$75,000 per year, 29% earn less than \$50,000.
  - More than 80% of commercial building owners have allocated funds to green Initiatives this year, according to "2008 Green Survey: Existing Buildings," a survey jointly funded by Incisive Media's Real Estate Forum and GlobeSt.com, the Building Owners and Managers Association (BOMA) International and USGBC. Some 45% plan to increase sustainability investments in 2009.
- LEED-certified projects are directly tied to more than \$10 billion of green materials, according to a Greener World Media study on green building. That could reach more than \$100 billion by 2020, contributing to a vibrant industry that could drive an economic recovery.
  - The Center for American Progress and the Political Economy Research Institute at the University of Massachusetts Amherst, in a September 2008 study, found that a national green economic recovery program investing \$100 billion over 10 years in six infrastructure areas would create 2 million new jobs. The investments

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## USGBC UPDATE - March 2009

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would include retrofitting existing buildings to improve energy efficiency and investing in wind power, solar power and next-generation biofuels.

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U.S. Green Building Council
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Published on GreenBiz.com (http://www.greenbiz.com)

# Perkins+Will Launches First Chemical Blacklist for Building Designers

By Jonathan Bardelline Created 2009-11-10 12:50

New York, NY — Architectural design firm <u>Perkins+Will</u> has created a list of 25 chemicals that are commonly used in the building industry but also pose a number of health threats to humans and the environment.

With its new <u>Perkins+Will Precautionary List</u>, the firm is hoping to educate designers, architects and others in the world of buildings about the chemicals, their dangers and atternatives. Perkins+Will is also hoping that the list, which will grow over time, will spur the creation of alternatives where they currently do not exist.

"We realized that a lot of this information is siloed, either intentionally or not," said Peter Syrett, associate principal at Perkins+Will and one of the creators of the list. "This is an attempt to take what we thought are the most common questionable chemicals in our work as designers and identify them and a more cautious approach to using them."

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Obama's Nuclear Madness and the Future of 'Clearr' Energy

HP. Irtel, General Mills Top List of Best Corporate Citizens

Finding the Greenest Companies in Silicon Valley

Eateries Move to Address Mountains of Food and Water Waste

Each entry for a chemical on the free, online list includes the chemical name, its origin and source, a summary of its health impacts, a list of building products where it's commonly found, alternative materials, regulations, known and suspected health effects and links to government databases.

Some of the chemicals on the list are arsenic, bisphenol A, cadmium, copper, halogenated and brominated flame retardants, lead, mercury, phthalates, polystyrene and PVC.

"All these chemicals have either been listed or classified on government regulatory lists as cautionary chemicals, so we set that as a guidepost," Syrett said.

While government regulations are the minimum that companies must comply with, more

3/3/2010 35

The Perkins+Will list can be searched by chemical name, building category (like flame retardants, heavy metals and wood additives), building divisions and sections (concrete, masonry, finishes, etc.) and health effects.

The list got started when Perkins+Will interior designer Chris Youssef was working on designing a cancer center and, since a cancer center would be the worst place to have unhealthy chemicals lingering, wanted to avoid using any known or suspected carcinogens.

Now that they have compiled their research on the chemicals, Perkins+Will hopes to make more designers aware of the chemical impacts and help open up dialogue about safer alternatives between designers and suppliers. Youssef said that dialogue will hopefully lead to the creation of safer alternatives for chemicals that have no alternatives.

"Our goal is a simple one, that we should not specify products that are harmful to humans, animals and the environment," said Syrett.

Danger sign - http://www.flickr.com/photos/g-hat// CC BY 2.0

GreenBiz GreenerBuildings GreenerDesign Architecture & Design Green Chemistry & Toxics Materials Toxics

Source URL: http://www.greenbiz.com/news/2009/11/10/perkinswill-creates-chemical-precautionary-list-building-designers

	101	
PRECAUTIONARY 115		
41. C		

## Materials Selection and Specification Prerequisites

## Materials Prerequisite 1: Specify Low Emission Materials

MP1. For all newly installed materials, and/or materials to be refinished, specify materials that have been tested and certified for low emissions of volatile organic compounds (VOCs).

The selection of materials for the construction and furnishing of a school can have a major impact on indoor air quality. Many common indoor building and surfacing materials contain a variety of potentially carcinogenic and/or toxic chemicals. These chemicals are released into the air and can cause a variety of health problems, from minor irritation to major health problems. Recent studies have implicated volatile organic compounds (VOCs) as significant risk factors for asthma. Exposure to VOCs emitting from sources such as cigarette smoke, cleaning agents, solvents, furnishings, paint, flooring products, building materials, and personal hygiene products may increase the risk of asthma and other ailments. This is especially important in schools because children are typically more sensitive to indoor air pollutants than adults.

To me	et this prerequisite, the following materials must be certified:
	50% of adhesives and sealants
	All acoustic ceiling tiles and acoustic wall panels
	All carpet systems
	All interior paint
0	All wall coverings (do not use vinyl wall paper)
Q	All solid and composite wood flooring
	All insulation installed interior to the building vapor barrier
Q	All resilient flooring
	OC products must be certified by one of the programs listed below or be listed by the mia CHPS program:
a	Scientific Certification Systems
	Indoor Advantage – Gold
a	Floor Score
	GREENGUARD Certification Program - http://www.greenguard.org/
	Carpet and Rug institute
	Green Label Plus

## Documentation for Materials Prerequisite 1

Submit a document providing specifications for the interior products covered by the above categories. Include in the document:

- 1. Product brand name and manufacturer identifying product number.
- 2. Identification that the product is certified by one of the qualifying programs.
- 3. If the product is not listed, provide product specifications demonstrating compliance with the standards for the appropriate certifying program.

GREENGUARD Environmental Institute, http://www.greenguard.org/

Green Seal, http://www.greenseal.org/

EPA, http://yosemite1.epa.gov/oppt/eppstand2.nsf/Pages/Homepage.html/

Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, by the California Department of Health Services, http://www.dhs.ca.gov/ehib/IAQ/VOCS/LORS/Section01350 7 15 2004 FINAL%20WITH%2 OADDENDUM-2004-01 doc

## Materials Prerequisite 2: Storage and Collection of Recyclables

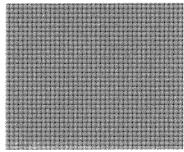


M.P.2, Provide an easily accessible area serving the entire school that is dedicated to the separation, collection, and storage of materials for recycling, including - at a minimum paper (white ledger and mixed), cardboard, glass, plastics, and metals

The recycling of many common materials is promoted throughout the Northeast with a variety of recycling programs and services. Typical recyclables include aluminum cans, steel cans,

newspaper, white paper, corrugated cardboard, single polymer plastics, and glass bottles. In order to qualify for this credit, school administrators must designate areas in the school where these materials can be handled and sorted.

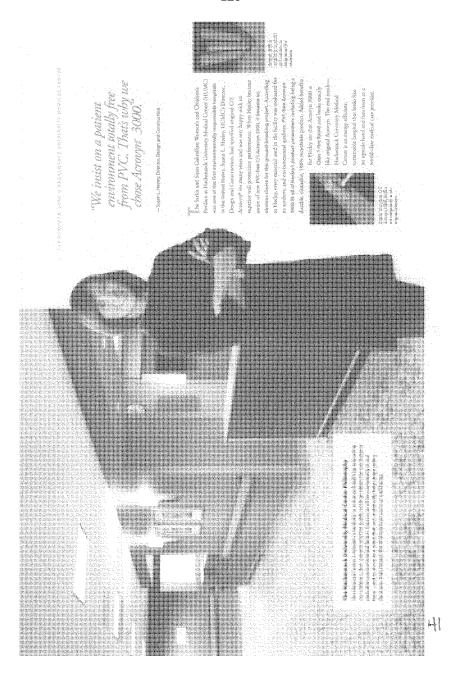
Early in the building occupancy programming, be sure to reserve space for recycling functions and show areas dedicated to the collection of recycled materials on space utilization plans. Consider the question of how recyclable materials will be collected and removed from classrooms and teachers' lounges. When recycling bins are used, they should be able to accommodate a 75% diversion rate (from normal wastebasket contents) and be easily accessible to custodial staff and recycling collection workers. Consider bin designs that allow for easy deaning to avoid health issues.



Recycling at Profile School, NH. Image countesy of NEEP.

energy & resource solutions





This is a forwarded message ----Original Message--

From: Andrews, Matthew WMr CTR USA [mailto:Matthew.Andrews@AMEDD.ARMY.MIL] Sent: Friday, May 01, 2009 12:51 PM o: cfunkhouser@hcwh.org ubject: Health Care Sustainability Products

Dear Ms. Funkhouser, health care facilities everywhere share the need to substitute environmentally and health hazard products for their

Each year the US Army Medical Command (MEDCOM) hosts a conference for the US Army health care facility managers and staffs (hospitals, clinics, first aid stations, etc) called Force Health Protection (FMS). This year the conference is being held 14-21 Aug in Albuquerque, NM. This year the conference is being held 14-21 Aug in Albuquerque, NM. Each of the health care facilities usually sends one or more representatives to the conferences. The US Army Health Promotion and Preventive Medicine (USACHEPM), the organization I work for, which is part of MEDCOM providing technical support and training to all Army health facilities, would like to provide an "interactive" display of products that eliminates or reduces occupational and environmental hazards while maintaining quality patient care and containing costs. Your website suggests your services are in line with our effort.

What we want to do at the conference is to have examples of the products that have been accepted by the health care community as eliminating or reducing occupational and environmental hazards while maintaining quality patient care and containing costs, provide improvement data (risks as well as costs), how the product can be purchased, and who in the Army is presently using that new product (we expect there will be attendess from those facilities that can give direct testimonials to the roducts).

So if this is an effort that you think you can support, I ask if you can provide us with samples, cost comparisons between these products and those formally used that were replaced, and lastly, Army medical facilities that you know that have purchased and are using the products, especially large Army health care facilities (smaller Army health care facilities do not have the resources or time to explore alternatives).

I would also like to hear of any ideas you might have that will allow the attendees to handle the products, we are striving, as I mentioned earlier to have the display interactive and have the participants get "hands on" experience. I am sure you have marketing standards you employ at trade shows that have the same goals.

Looking forward to hearing from you, I believe this venue is an attractive opportunity your products to be seen by the Army health care facilities managers and staffs.

Sarmy Center for Health Promotion and Preventive Medicine Directorate of Environmental Health Engineering Hazardous and Medical Waste DSN 584-5239 NAX 410-436-7643

matthew.andrews@amedd.army,mil

## Green Buildings Rise in a Flot Economy

Green building activity sustained impressive growth during 2009, amid a brutal construction market that has decimated other segments of the construction marketplace, according to the 2009 Green Building Market & impact Report published by GreenerBuildings.com.



According to report author and GreenerBuildings.com executive editor Rob Watson, floor area registered and certified by the U.S. Green Building Council's LEED green building rating system in 2009 is estimated to grow by over 40 percent compared to last year's totals, for a cumulative total of over 7 billion square feet worldwide since the standard was launched in 2000.

Other findings:

 The estimate of reduced vehicle miles traveled (VMT) grew to 760 million VMT to date versus 400 million in 2008. By 2030, the annual gasoline savings are expected to equal current U.S. imports from the Middle East.

- Total water savings from LEED through 2009 is estimated at 15 billion gallons, comprising 0.5 percent of annual non-residential water use. By 2030, LEED results in nearly 1.3 trillion gallons of saved water, equivalent to 30 percent of current annual non-residential water use.
- Annual carbon dioxide savings from LEED buildings is approximately 2.9
  million tons from energy efficiency and renewables, a figure that is expected
  to grow to 130 million tons per year by 2020 and almost 320 million tons
  annually by 2030.
- An average of at least 580,000 employees are currently enjoying improved indoor environments in LEED buildings at present, and the "green building workforce" is expected to approach 29 million by 2020 and almost 64 million by 2030. The productivity benefits from LEED buildings to date range from \$230 to \$450 million.

To download the free report, go to www.greenerbuildings.com/greenbuildings.mpactreport.

And the Environmental Defense Fund <u>leunched an innovation Exchange</u> to encourage companies to share best practices related to energy, water, climate and a host of other issues. Like the others, it hopes to propagate technologies and best practices.

All of these utilize different models, but their goals are the same: to stimulate and accelerate green innovation, as companies dip into the pool of existing IP to leverage other companies' creativity and successes. And it offers up a new model of sharing, one that recognizes that what works in one sector can be applied, perhaps in an entirely different ray, in another.

gasoline savings from LEED-certified green buildings are expected to equal current U.S. imports from the Middle East.

By 2030, the annual

GRÉEN BUSINES



## The Louisville Charter for Safer Chemicals A Platform for Creating a Safe and Healthy Environment through innovation

Fundamental reform to current chemical laws is necessary to protect children, workers, communities, and the environment. We must shift market and government actions to protect health and the natural systems that support us. As a priority, we must act to phase out the most dangerous chemicals, develop safer alternatives, protect high-risk communities, and ensure that those responsible for creating hazardous chemicals bear the full costs of correcting damages to our health and the environment.

By designing new, safer chemicals, products, and production systems we will protect by veryining lews, size tremindary, products, and production systems we will protect people's health and create healthy, sustainable jobs. Some leading companies are already in this path. They are creating safe products and new jobs by using clean, innovative technologies. But transforming entire markets will require policy change. A first step to creating a safe and healthy global environment is a major reform of our nation's chemicals policy. Any reform must:

Seek to eliminate the use and emissions of hazardous chemicals by altering production processes, substituting safer chemicals, redesigning products and systems, rewarding innovation and re-exemining product function. Safer substitution includes an obligation on the part of the public and private sectors to invest in research and development of sustainable chemicals, products, materials and processes.

Prinary Our Persistent, Broaccimulative, or Highly Toxic Chemicals Prioritize for elimination chemicals that are slow to degrade, accumulate in our bodies or living organisms, or are highly hazardous to humans or the environment. Ensure that chemicals eliminated in the United States are not exported to other countries.

Give the Public and Warhars the Full Right-to-Know and Participate Provide meaningful involvement for the public and workers in decisions on chemicals. Disclose chemicals and materials, list quantities of chemicals produced, used, released, and exported, and provide public/worker access to chemical hazard, use and exposure information

Act on tarly Warnings
Act with foresight. Prevent harm from new or existing chemicals when credible evidence
of harm exists, even when some uncertainty remains regarding the exact nature and
magnitude of the harm.

uire Comprehensive Safety Data for 48 Chemical

Negure Comprehensive Sofery Data for all Chemicals. For a chemical to remain on or be placed on the market manufacturers must provide publicly available safety information about that chemical. The information must be sufficient to permit a reasonable evaluation of the safety of the chemical for human health and the environment, including hazard, use and exposure information. This is the principle of "No Data, No Market."

Take Immediate Action to Protect Communities and Workers
When communities and workers are exposed to levels of chemicals that pose a health
hazard, immediate action is necessary to eliminate these exposures. We must ensure that
no population is disproportionately burdened by chemicals.

Dates must be set for implementing each of these reforms. Together these changes are a first step towards reforming a 30-year old chemical management system that fails to protect public health and the environment. By implementing the Louisville Charter and committing to the innovation of safer chemicals and processes, governments and corporations will be leading the way toward a healther economy and a healther society.

Background Paper #1

\* Require Safer
Substitutes and

### Background Paper #2

rease out Persistent, Bisaccumulative, te Highly York Chemicals

Background Paper #3

\* Give the Public an Workers the Full Right-to-Know and Participate

Background Paper #4

\* Act with Foresight

Background Paper #5 ➤ Require

Safety Data for All

Background Paper #5
\* Yake Immediate
Action to Protect Communities and

Workers

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June 11, 2010

# **Products That Are Earth-and-Profit Friendly**

By SINDYA N. BHANOO

As the world's greatest soccer players take to the fields at the FIFA World Cup in South Africa, many are wearing jerseys made almost entirely from plastic bottles rescued from landfills in Japan and

It is, if nothing else, good publicity for Nike, the maker of the jerseys and the official sponsor of nine teams, including the United States, Brazil and Portugal.

Yet what many might view as a gimmick is also part of a broadening effort by the company to incorporate sustainability, or environmentally responsible practices, into its product design. Around the globe, a growing number of manufacturers are including more recyclable or biodegradable imponents into products.

Companies making changes run the gamut — there are furniture makers, carpet manufacturers, clothing retailers and makers of shampoos and household cleaners. And with big-box retailers like Wal-Mart joining in, industry analysts say the sustainable philosophy is no longer viewed as the province of high-end sellers like Nike or Herman Miller, the furniture maker.

In 2008 alone, American consumers doubled their spending on sustainable products and services to an estimated \$500 billion, according to a survey that polled more than a 1,000 people by Penn Schoen Berland Associates, a market research firm that studies the green economy.

The movement can be confusing to navigate and goes by many monikers — "cradle to cradle," eccefficiency, life cycle improvement, closed-loop production. In its most utopian form, it envisions a world in which all products are made from natural materials and are 100 percent reusable, recyclable or biodegradable, never ending up in landfill.

At its most pragmatic, it is mainly about cutting costs — by reducing waste, selling recyclable components and reusing byproducts like rubber or plastic to create a new product. For a large company, this can mean millions of dollars in annual savings.

45

"When sustainability burst onto the scene, it was in the responsibility category, something that a company should do because it was the right thing to do," said Beth Lester, a vice president at Penn Schoen Berland Associates. But now it is equally about saving money, she said.

For example, Wal-Mart attributed more than \$100 million of its 2009 revenue to a decision to switch to a recyclable variety of cardboard in shipments to its 4,300-plus stories in the United States. Now it sells the cardboard to a recycler rather than paying to ship the waste to a landfill.

The company also sells photo frames made from its polystyrene waste and recycles plastic scraps leftover from producing Wal-Mart-brand diapers into material used in building new Wal-Mart stores.

"It's coming from economics," said Marc Stoiber, vice president for green innovation at the Chicagobased business consultancy Maddock Douglas. "If you look at the big guys like Wal-Mart, they embrace green because it's all about efficiency."

Matt Kistler, the senior vice president of sustainability at Wal-Mart, agreed. "If this was not financially viable, a company such as ours would not be doing it," he said.

In its most ambitious project, Wal-Mart, after surveying more than 100,000 suppliers worldwide, has embarked on a yearlong effort to tag every product it sells with information about its production and life cycle.

Nike first dipped its toe into sustainability in 1993, when it began grinding up old shoes and donating the material and other manufacturing scraps to builders of sports surfaces, like tracks and basketball courts. That program continues, but the company has shifted gradually from one-of-a-kind initiatives to a long-term plan to "minimize or eliminate all substances known to be harmful to the health of biological or ecological systems."

In the last four years, the company's sustainable design group, known as Nike Considered Design, has brought shoes and athletic clothing to market that incorporate waste from the factory floor and a less toxic type of rubber. Some of Nike's clothing incorporates zippers and cords made from old shoes.

The company has also reduced its use of solvents, the toxic glue used to cement soles to the bottom of shoes.

"Our customers expect this from us," said Lorrie Vogel, general manager of Nike's Considered group. "It's not about two or three green shoes — it's about changing the way our company does things in general."

As companies move to reduce waste and analyze the components of their products, many are turning to outside consultants for help. Among the most prominent is William McDonough, co-author of a 2002 book called "Cradle to Cradle: Remaking the Way We Make Things."

He runs a consultancy that evaluates companies' policies in areas like toxicity, renewable energy, water stewardship and sustainability and awards corporations Cradle to Cradle Certification if they make the necessary changes.

His firm, McDonough Braungart Design Chemistry, has worked with Nike, Herman Miller and Shaw, the world's largest carpet maker. Herman Miller says that 50 percent of its revenue now comes from products that are Cradle to Cradle-compliant, and it is aiming for 100 percent.

Shaw has collected 300 million pounds of used carpet in the last three years and reused 85 percent of it.

"I've never met one C.E.O. who said 'Give me a toxic product,' " Mr. McDonough said. "But they need business models that are effective for them."

Still, companies can be reluctant to make trade-offs when performance or aesthetics suffers.

Method, a maker of household cleaning products, shuns chemicals like ammonia, bleach and hithalates and maintains a list of earth-friendly ones. But when it came to the design of its bottles, the company stood firm, declining to reduce the plastic content beyond a certain point because it believed that it would make them less visually attractive, according to a recent report in The McKinsey Quarterly, an online business management journal.

Companies may also have to weigh a product's toxicity level against its longevity. The retailer Patagonia is viewed as environmentally conscious — 75 percent of the clothing it sells is recyclable — but it has had difficulty finding nontoxic dyes. For now, Patagonia prefers to stick with colorfast dyes, although not all are harmless to the earth.

"It's super-easy to find an environmentally friendly dye that will fade in three washes," said Jenn Rapp, a spokeswoman. "But a garment that lasts 20 years is much more friendly than one that lasts five months."

Even champions of sustainability say that consumers should be wary of giving companies too much credit or accepting all of their claims. Makers of cleaning agents in particular may offer an expensive "green line" of offerings but leave the rest of their products untouched, some say.

"I think the cradle-to-cradle concept is great," said Wood Turner, executive director of Climate Counts, a nonprofit group that scores manufacturers of consumer products makers on their track Companies Cut Costs With Sustainable Policies - NYTimes.com

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records. "The problem is that most companies are not as inclined to push that into all their products and all their brands.

"I have to ask, is this really just an example of green tokenism, or does it reflect deep thinking on a company's part?"

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#### Section 3

### **Construction Specialties, Inc.**

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Certification Criteria	
Material Health	

Construction Specialties, Inc. Company Information

Year the Company Started: 1948

Ownership: privately owned

Type of Business: manufacturing

Products Manufactured: Interior wall protection, entrance flooring systems, expansion joint covers, sun

controls, cubicle curtain tracks, grilles, Acrovyn Doors, Louvers, specialty

venting, process air conditioning

Total Number of Employees Worldwide: 1,620

State of Corporation: New Jersey

2009 Worldwide Sales Volume: \$320 million

## Construction Specialties, Inc. Company Information

Corporate Headquarters 3 Werner Way Lebanon, NJ 08833

#### Locations

Construction Specialties, Inc. 49 Meeker Avenue Cranford, NJ 07016 (Manufacturing and Sales)

Construction Specialties, Inc. 6696 Route 405 Highway Muncy, PA 17756 (Manufacturing and Sales)

Construction Specialties, International, Inc. 3 Werner Way Lebanon, NJ 08833 (International Sales)

Construction Specialties, inc. C/S Eldercare Interiors 225 Regency Court Brookfield, WI 53045 (Sales)

Data Aire, Inc. 230 West Blueridge Avenue Orange, CA 92865 (Manufacturing)

Grand Entrance 4640 Wedgewood Blvd. Suite 108 Frederick, MD 21703 (Sales)

C/S Construction Specialties Co. 895 Lakefront Promenade Mississauga, Ontario L5E 2C2 Canada (Manufacturing and Sales) Construction Specialties (UK) Ltd. 1010 Westcott Venture Park Westcott Buckinghamshire HP18 0XB (Manufacturing and Sales)

C/S France 135 Rue Edouard Isambard PACY SUR EURE CEDEX F-27120 France (Manufacturing and Sales)

C/S Bauprofile GmbH Heerstrasse 74 Heme 44653 Germany (Sales)

C/5 Polska Sp. z o.o ul. Szczecinska 34 Kobylanka, zachodniopomorskie 73-108 Poland (Manufacturing)

C/S Group Italia Via Carlo Cattaneo 1/3 24030 Ambivere (BG) Italy (Sales)

C.S. Steel S.A. Oficiana De Representacion C/Alicante, S/N Albal, Valencia Spain (Sales) Construction Specialties Middle East LLC 1705 Dubai World Trade Center PO Box 9260 Dubai U.A.E. (Sales)

Conspec (Singapore) Pte Ltd 298 Tlong Bahru Road #13-01 Central Plaza Singapore 168730 (Sales)

Construction Specialties Australia Pty Ltd Unit A7, 1-3 Endeavour Road Caringbah, New South Wales 2229 (Sales)

Conspec international (HK) Ltd Unit No. 1107 - 11th Floor Tins Centre 777 Lai Chi Kok Rd Cheung Sha Wan, Kowloon Hong Kong (Sales)

Construction Spec (Malaysia) Sdn Bhd 39 Jalan U1/30 Hicom Glenmarie Industrial Park Shah Alam, Selangor 40150 (Sales)

Conspec International 22 Soi Amnuaywat, Suthisarn Road Samsennok, Huaykwang Bangkok, Thailand 10320 (Sales)

Construction Specialties (UK) Ltd Trident House 175 Renfrew Rd Paisley, Renfrewshire PA3 4EF Scotland (Sales)

Igor Shaykevich UI Novolesnaya dom 11 kv 27 Moscow, Russia 103055 (Sales) Fabricas Elena S.A. de C.V. K.M. 7.5 Carr Presa La Amistad PQE Ind LA Paz Acuna, Coah Mexico (Manufacturing)

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CS Bauprofile Handelsgmbh LAINZER STRASSE 11/5 A-1130 VIENNA Austria

Fabricas Elena 107 Johnson Blvd Del Rio, Texas 78840 (Manufacturing) October 15, 2009

To: Scott Ogden, EHS

Re: Chemicals Policy; addition to ISO 14001

From: Howard Williams

The demand for environmentally responsible and relevant building products is growing rapidly. Building owners, Architects, contractors and building occupants want products made with chemicals that have low to no toxicity and which at the end of the product lifecycle are used to create new products and/or materials.

As we daily seek to fulfill our Corporate Mission to become a "World Leader of quality specialty building products and services", following our vision, "Creating products that make buildings better", we herein subscribe to these four primary guiding principles as the foundation of our Chemicals Policy.

- Know and disclose product chemistry. We will identify the substances associated with and used in our products across their lifecycle and will increase as appropriate the transparency of the chemical constituents of our products, including public disclosure of chemicals of high concern and 3<sup>rd</sup>party certification(s).
- Assess and avoid hazards. We will determine the hazard characteristics of chemical constituents and formulations in our products, use chemicals with inherently low hazard potential, prioritize chemicals of high concern for elimination, minimize exposure when hazards cannot be prevented, and redesign products and processes to avoid the use and generation of hazardous chemicals.
- 3. Commit to continuous improvement. We will establish operational governance structures; policies and practices that create a framework for the regular review of product and process chemistry, and that promote the use of chemicals, processes, and the redesign/creation of products with inherently lower hazard potential.
- 4. Support public policies and industry standards that: advance the implementation of the above three principles, ensure that comprehensive hazard data are available for chemicals on the market, take action to eliminate or reduce known hazards and promote a greener economy, including support for green chemistry research and education.



## DET NORSKE VERITAS

## MANAGEMENT SYSTEM CERTIFICATE

Certificate No. CERT-12023-2007-AQ-HOU-ANAB

This is to certify that

#### Construction Specialties Inc.

6696 Route 405 Highway, Muncy, PA 17756 USA

Additional Locations

Nite Same	Site Address	Site City	Site State	Site Main Activities
Construction Specialities, Inc.		Mostgomery	PA	Wood working, Purchasing, Inspection, Planning, Receiving Shipping
Construction Specialities, Inc.	247 South Broad Street	Objectible	PA	Mandictoring
	has been formed to be	astonia to the	. 4 faireanns	mont Contain Standard

#### ISO 9001:2008

This Certificate is valid for the following product or service ranges:

#### The Manufacture of Entrance Flooring Systems, Expansion Joint/Fire Barriers, and Interior Wall Protection

May 02, 2007

February 03, 2013

the earth has been performed under suppression of

Dominick Cantore

Houston, Texas, February 94, 2010 for the According Unit. DET NORSKE VERIFAS CERTIFICATION INC., HOUSTON TEXAS

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DUNISCHERT ARTNOSER Vermet Fernhaum im Aberthoden Freie Kop, Beiss 1749-741. CBS, Sowiese CAN (2003-790-790)

Certificate US10/74584

The energement system of

#### **Construction Specialities**

6696 Route 405 Highway Munoy, PA 17756 United States

has been assessed and costifed as theeting the requirements of

#### ISO 14001:2004

For the following actualist

The manufacturing of construction specialties such as Handrails, Doorway Flooring, Wall Panels and Expansion Joints, excluding the manufacture of doors in the Muncy, PA facility and corporate marketing activities at the Muncy & Montgomery facilities.

Further identicency requesting the script of this contribute and the expressions of SCI 1400 1004 requirements may be obtained by contributing the organization.

This constitute is valid from 4 February 2010 until 3 February 2013 and remains valid subject to satisfactory surveillance audit. Recentification audit due a minimum of 60 days before the expiration date. issue 1. Certified since 4 February 2010

This is a multi-site certification. Additional site details are listed on subsequent pages.

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Certificate US10/74584, continued



## Construction Specialities

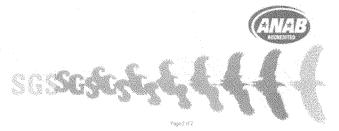
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Additional facilities

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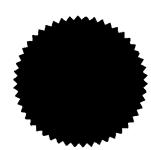


## HARRISBURG, PA

# Congratulations

In the Sanate, July 28, 2008

- Whereas, Construction Specialises, Inc., is buing honored by Godernox Eddard Rendell on September 17, 2008, with a 2008 Sodernox's Adard for Endiconmental Excellence; and
- Whereas, The Sovenor's Averds for Environmental Excellence are availed to organizations and companies in Tennsylvania that have demonstrated a commitment to environmental excellence through leadership in pollution prevention, energy officiency and subtainable development initialisies; and
- Whereas, In 2002, Construction Specialities, Inc., formalized its environmental policies and practices in an Gristronmental Positioning Statement. The company replaced a hazardous solvent used to alian adhasive from equipment with a nonlaquedous solvent, which is reclaimed and recycled by the supplies. The company also reuses its office pages by skeedding it and using it as insulation and ewitioning for shipping. Overall, Construction Specialities, Inc., has insureed production and reduced vasteriales and nonlaquedous and hazardous material production.
- Two therefore, the Senate of the Commonwealth of Pennsylvania heartily congretalates Construction Syncialities, Inc., on the prestigious hance which has been bestowed upon it; offers best violes for a continued tradition of excellence in the years to come;
- And desects that a copy of this document, sponosed by Sunator Roger A. Madigan, be transmitted to Construction Specialises, Suc., 6696 Route 408 Highway, Muncy, Pennsylvania.



Smake Rague A. Madiguel

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## THEAHILL



#### Green buildings need safer chemicals policy reform

By Howard Williams, vice president of Construction Specialties - 07/16/10 01:39 PM ET

We all take risks. It's a part of our everyday lives and a part of day-to-day business. But accurately assessing risks and identifying safer paths of action is not something that comes naturally to us. From consumer debt to the Gulf oil spill to the collapse of the auto and financial sectors, we've taken risks without accurately understanding the impact of our decisions. All too often optimism trumps caution.

America faces another set of similarly impactful risks, and this time it gets really personal — it affects human health. The issue is toxic chemicals in products, and the opportunity is chemicals policy reform.

Businesses do not always have free and open access to the information needed to make responsible decisions concerning chemical ingredients in products. That places American business at a disadvantage because we lack the ability to economically assess the risks posed by many of the chemicals we use in our products. Current federal chemicals policy does not require companies to disclose chemical ingredients down the supply chain, forcing manufacturers to perform expensive chemical content analysis on their own. If nothing is done to give American manufacturers the ability to know the chemicals within the materials we use, we will be unable to advance the market-driven opportunities presented by new, innovative safer chemicals. America will lose this chance to build a stronger, more stable economy.

Construction Specialties is a privately held U.S. company that designs and manufactures specialty products for buildings. Our environmental commitment is to create products that lower the environmental impact on the buildings they become part of and to conduct business in manner that endeavors to have minimal impact on our environment. Yet we are often challenged in meeting these goals by the lack of toxicity data on chemicals and the lack of transparency on the chemicals in the materials we purchase. Manufacturers often confront the reality that they do not even know the chemicals in their products, let alone whether those chemicals are safe for human health and the environment.

Our current regulatory system for managing toxic chemicals — the 34-year-old Toxic Substances Control Act (TSCA) has failed to promote the use of safer alternatives to toxic chemicals. Fortunately, Congress is now moving to revise TSCA. Both the House and the Senate are considering legislation that would require comprehensive safety data on all chemicals in commerce. While safety data is essential, two additional elements, now missing from legislative proposals, are necessary to promote the use of safer chemicals in products.

First, businesses need greater transparency on the chemicals in the products they buy. Safer chemicals policy reform should include a requirement that all products from chemical manufacturers to final product manufacturers include a chemical ingredient profile — a listing of the chemical ingredients in

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http://thehill.com/blogs/congress-blog/energy-a-environment/109279-green-buildings-need... 7/27/2010

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the product. Legislation can be written in a way to protect confidential business information, yet provide critical information on chemical content across the business supply chain.

Second, Congress should also require final product manufacturers to provide consumers with information on chemicals of high concern in their products. At a minimum, consumers should know if chemicals of high concern to human health and the environment are in the products they purchase. Such a requirement will generate demand for safer, greener chemicals.

We urge the congressional committees working on chemicals policy reform to include business-tobusiness disclosure of chemicals and disclosure of chemicals of high concern to consumers in their proposals before the August recess.

Chemicals policy reform, if done well, will support the market movement to safer alternatives to toxic chemicals in products. Congress, along with the building sector, has an opportunity to improve indoor air quality and thereby human health and the environment through the greater use of inherently safer chemicals in building products.

Howard Williams is vice president of Construction Specialities, a member of the Business-NGO Working Group (BizNGO). BizNGO is a unique collaboration of business and NGO leaders who are creating a roadmap to the widespread use of safer chemicals in consumer products.

#### Source

http://thehill.com/blogs/congress-blog/energy-a-environment/109279-green-buildings-need-safer-chemicals-policy-reform

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#### 4 Material Health

#### 4.1 Material Transparency

Regulred for Basic, Silver, Gold, and Platinum certification levels.

Applicant shall identify all homogeneous materials present in the finished product. This is typically done by breaking the product down into assemblies, then sub-assemblies, then components, and finally into pure homogeneous materials. Any homogeneous material present at 100 ppm or higher in the finished product must be reported. PVC present at ANY level in the finished product must be reported.

For wood based products, or for products that use wood as a component, the source of that wood must be identified and it should be noted as to whether that source is an endangered forest.

Example — Office chair is first broken down into back assembly, seat assembly, tilt mechanism, pneumatic cylinder, base, and casters. Each assembly must then be further broken down into sub-assemblies or materials. Casters would be broken down into now wheel, steel exte, steel printle, etc. Painted 5 star base would be broken down into cast aluminum and powdercoat. Finally, each material must be broken down into its constituent ingredients.

Since material formulations are often proprietary to the supplier, the certifying body will enter into a Non-Disclosure agreement and will allow the supplier to submit the ingredient information directly to the certifying body. Material formulations must be reported down to the 100 ppm level, however the following substances must be reported at any level:

- . Toxic heavy metals such as lead, mercury, hexavalent chrome, and cadmium
- Pigments, dyes, or other colorants
- Phthalates
- Haiogenated organics

For products that contain recycled content as an input it is often difficult, if not impossible, to completely characterize the chemical content of the recyclate. In the case of metals, this is easier as a basic elemental analysis will show what contaminants, if any, are present. In the case of recycled plastics, the base resin must be identified and smallytical testing must be done to determine the presence of any heavy metals or organohalogens. For paper products, recyclate must be tested (on a quarterly basis at a minimum) for the presence of heavy metals, organohalogens, and chlorine/chloride. The results of these tests will be used in lieu of actual chemical composition.

#### 4.2 Defined as a Biological or Technical Nutrient

Required for Basic, Silver, Gold, and Platinum certification levels.

Applicant shall define the product with respect to the appropriate cycle (i.e., technical or biological) and all components shall be defined as either biological or technical nutrients. If the product combines both technical and biological nutrients, they should be clearly marked and easily separable. This is more of a strategic criterion and therefore there is no calculation or metric associated with it.

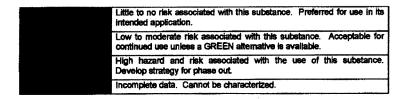


#### 4.3 Ingredient Characterization.

Required for Basic, Silver, Gold, and Platinum certification levels.

All materials shall be characterized based on their impact on Human and Environmental Health. The certifying body will perform this evaluation once all ingredients in all materials have been identified. The criteria listed on the next page are used in the evaluation of these two impact categories.

Based on the interpretation of the data for all criteria, chemicals and materials are "scored" for their impact upon human and environmental health. A key factor in this evaluation is the risk presented by the component/chemical, which is a combined measure of identified hazards and routes of exposure for specific chemicals and materials, and their intended use in the finished product. The "score" is illustrated by the following color scheme:



For both the human and environmental health criteria, there are firmly established cutoff values for determining hazards. For example, in the case of Acute Toxicity (human health) any substance with an onal LD<sub>50</sub> value less than 200 mg/kg (rat, mouse, guinea pig, etc) will be considered acutely toxic.

At the Basic and Silver levels, 5% by weight of Grey assessed materials are allowed. However, those Grey materials must be fully assessed within six (6) months of certificate issuance or they will be considered Red.

#### 4.3.1 Human Health Criteria

The following is a list of the human health criteria used for substance evaluation by the MBDC Cradle to Cradle® Design Protocol. The criteria are subdivided into Priority Criteria (most important from a toxicological and public perception perspective) and other Additional Criteria. Substances that do not pass the Priority criteria are automatically scored RED and recommended for phase-out/replacement.



Criteria	Description
PRIORITY	
Carcinogenicity	Potential to cause cancer
Endocrine Disruption	Potential to negatively effect hormone function and impact development
Mutagenicity	Potential to damage DNA
Teratogenicity	Potential to harm fetus
Reproductive Toxicity	Potential to negatively impact reproductive system

ADDITIONAL	
Acute Toxicity	Potential to cause harm upon initial, short term exposure
Chronic Toxicity	Potential to cause harm upon repeated, long-term exposures
irritation of Skin and Mucous Membranes	Potential to Irritate eyes, skin, and respiratory system
Sensitization	Potential to cause allergic reaction upon exposure to skin or airways
Other	Any additional characteristic (e.g., flammability, skin penetration potential, etc.) relevant to the overall evaluation but not included in the previous criteria

#### 4.3.2 Environmental Health Criteria

The following is a list of the environmental health criteria used for substance evaluation by the MBDC Cradle to Cradle® Design Protocol.

Criteria	Description		
Fish Toxicity	Measure of the acute toxicity to fish (both saltwater and freshwater)		
Daphnia Toxicity	Measure of the acute toxicity to Daphnia (invertebrate aquatic organisms)		
Algae Toxicity	Measure of the acute toxicity to aquatic plants		
Persistence/	Rate of degradation for a substance in the		
Biodegradation	environment (air, soil, or water)		
Bioaccumulation	Potential for a substance to accumulate in fatty tissue and magnify up the food chain		
Climatic Relevance	Measure of the impact a substance has on the climate (e.g., ozone depletion, global warming, etc.)		
Other	Any additional characteristic (e.g., soil organism toxicity, WGK water classification, etc.) relevant to the overall evaluation but not included in the previous criteria		



#### 4.3.3 Material Class Criteria

The following material classes are scored RED due to the concern that at some point in their life cycle they may have negative impacts on human and environmental health. In the case of organohalogens, they tend to be persistent, bloaccumulative, and toxic, or can form toxic by-products if incinerated.

Criteria	Description
Organohalogen	Presence of a carbon - halogen (i.e., chlorine,
Content	bromine, or fluorine) bond
Heavy Metal Content	Presence of a toxic heavy metal (e.g., Antimony,
I	Arsenic, Beryllium, Cadmium, Chromium, Cobalt,
1	Lead, Mercury, Nickel, etc.)

#### 4.4 Material Avoidance

The tollowing tables list substances that will impact a product's ability to receive certification:

Substance Name	Silver Level	Basic Level	Prohibited for Certification
Halogenated hydrocerbons	Halogenated hydrocarbon content less than 1000 ppm, or presence of non-PBDE based brorninated flame retardants that are required to meet current flammability standards and for which there are NO available alternatives.	Halogenated hydrocarbons present at 1000 ppm or higher	PVC or other substances from the PVC family tree at any concentration.
Lead, Mercury, Cadmium, Chrome VI	Unintentional or "background contamination" allowed as long as total concentration of these 4 substances does not exceed 100 ppm. No single substance can exceed 50 ppm. (For metals, this limit is 100 ppm) Intentionally edded substances are allowed where needed for technical performance and for which there is a system in place to keep the material in a closed loop.	Total background contemination of all 4 can exceed 100 ppm as long as no single substance exceeds 100 ppm. (For metal alloys, this limit le 1000 ppm.) Intentionally added substances are allowed where needed for technical performance and for which there is no readily appearent route of exposure.	Total beckground contamination of any single substance in socees of 100 ppm. (or 1000 ppm for metals).  Any intentionally added amount that is not needed for technical performance.

NOTE - Testing for heavy metals will be required for all materials coming from regions of the world shown to have heavy metal contamination issues or concerns.



#### 4.5 Optimization Strategy

Required for Basic and Silver.

Once all problematic components have been identified (i.e. those substances assessed RED based on the criteria listed previously), the applicant must commit to the eventual phase-out/replacement of these substances. Applicant will have six (6) weeks to develop a strategy (in conjunction with the certifying body or independently), complete with budget and timeline, for the phase out/optimization of these inputs. The implementation of this plan will be subject to an annual review to judge whether or not sufficient progress has been made to merit continued Cradle to Cradle earlification.

For products containing wood, if that wood is sourced from an endangered forest there must be a strategy developed for sourcing that wood from a non-endangered forest.

#### 4.6 Product Formulation Optimized

Required for Gold and Platinum.

Applicant must demonstrate that all Red assessed materials/chemicals have been phased out of the formulation.

For products containing wood this means that none of the wood can be sourced from an endangered forest.

#### 4.7 Cradle to Cradle® Emission Standards

Required for Gold and Platinum.

Applicant shall demonstrate compliance with the Cradle to Cradle® emission standards, which are defined as the following:

- TVOC < 0.5 mg/m<sup>3</sup>
- Individual VOCs < 0.01 TLV or MAK values (whichever is lower)
- No detectable VOCs that are considered known or suspected carcinogens, endocrine disruptors, mutagens, reproductive toxins, or teratogens. Based on the lab chosen to do the work what is considered "non-detect" may vary. For the purposes of this certification, anything below 2µg/m³. However, in the case of formaldehyde, it is virtually impossible to achieve this level as ambient air tends to have concentrations higher than this. Therefore we have adopted the California 01350 standard of one-half the REL of 33µg/m³ or 16.5µg/m³ as the threshold limit.
- Tirne Points -- 7 days for TVOCs and IVOCs
- Loading Scenarios BIFMA M 7.1 for office furniture and California Department of Health Services (section 01350) for everything else.

Labs approved for testing include Berkeley Analytical Associates, MAS, AQS, Forintek, and Syracuse University. All testing is done according to ASTM D5116 for small chamber, ASTM D6670 for large chamber, and BIFMA M 7.1 for office furniture.



Cradle to Cradle® Certification Page 20 of 30

#### 4.8 Percentage of "Green" Components

Required for Platinum certification only

Applicant shall demonstrate that material/product seeking certification is comprised of at least 50% "Green" assessed components.

All wood must be FSC certified.



## TMBDC

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Mr. Rush. The Chair now recognizes Dr. Mitchell for 5 minutes.

#### TESTIMONY OF MARK MITCHELL

Dr. MITCHELL. Thank you, Chairman Rush, and members of the Committee. My name is Dr. Mark Mitchell, I am a public health physician and I became concerned about—when looking at the rates of disease, I became concerned about the increase in the number of diseases that are related to the environment as opposed to other diseases which were declining. We saw an increase in those related that are related to the environment. So that is why I have formed the Connecticut Coalition for Environmental Justice, and I am the President of that, and also I am a member of the National Work Group for Environmental Justice Policy. We work with environmental justice communities which are communities that are low income, communities of color that are just proportionally burdened with environmental hazards and also have increased rates of disease from these environmental hazards.

I would like to talk a little bit about the exposure to these hazards throughout the chemical life cycle from extraction of chemicals, to production, to distribution, use, disposal, and legacy exposure to these chemicals. And I will talk a little bit more about what that is. H.R. 5820 goes a long way toward addressing the environmental justice concerns throughout the life cycle, the chemical life cycle.

The first part of the chemical life cycle is the extraction. And these include mining communities, but also places like along the Gulf Coast where people are being exposed today to oil spills that are washing up on their shores, and being exposed to chemicals from the oil as well as the dispersants that are used to disperse that oil. There are also a number of production communities such as Mossville, Louisiana and Louisville, Kentucky that have many chemical plants as well as other industrial facilities that are exposing residents to chemicals on a daily basis. And in these communities they have exceptionally high pollution rates. Rates that I believe would not be allowed in more affluent communities other than Mossville and West Louisville. And we are seeing very sick people in these communities. For example, we have a 30 year old that has a heart attack in the community. We are seeing clusters of Lupus, large numbers of hysterectomies, depression even, and premature death. These are communities that I would consider to be hotspots. And hotspots is a provision that is a new provision in this bill that would require that these communities reduce their pollution.

The next phase of use of chemicals of the life cycle of chemicals is the use phase. Low income communities are even more exposed than other communities to hazards in everyday products. For example in about a year ago in Connecticut we started testing toys for lead. And what we found is that toys from discount stores such as "dollar" stores were more likely to contain lead than other toys. And these are the things that are exposing low income people to these toxics in the toys. We are also concerned about legacy chemicals and legacy chemicals are chemicals that have out used—have gone past their useful life but are still—people are still being exposed to these kinds of chemicals. For example, PCB's TSCA banned PCB's in the late 1970's. However, people are still being ex-

posed to PCB's in the Bedford, Massachusetts for example they have two schools that are built on an old dumps that are still contaminated with PCB's. I am working with some of the housing developments that may also be built on this same dump. It is not clear right now, but the residents complained that when their children go out and play in the dirt that they get rashes, and rashes are one of the—are a potential issue that can be found with PCB's.

Also, H.B. 5820 requires a health based standard and includes aggregate exposure from all sources. And it consider—but it can consider the life cycle of chemical exposure and cumulative exposure. This is important to environmental justice communities since risk assessment has served environmental justice communities poorly. So in summary, we believe that this legislation goes far in addressing a number of environmental justice issues. We would like to see the bill passed out Committee this year, and I would like to thank you, Mr. Chairman for inviting me to this hearing. And I am certainly willing to answer questions later.

[The prepared statement of Dr. Mitchell follows:]

## Testimony by Mark A. Mitchell M.D., MPH before the

Subcommittee on Commerce, Trade, and Consumer Protection House Committee on Energy and Commerce in SUPPORT of H.R. 5820, The Toxic Chemicals Safety Act of 2010 July 29, 2010

Good Morning Chairman Rush and members of the Subcommittee. My name is Dr. Mark Mitchell. I am a public health physician who became concerned about the link between environmental factors and poor health outcomes in communities of color and low income communities of all races. I was previously the Director of Health for the City of Hartford, CT and before that, the Deputy Director of the Kansas City, Mo Health Department. I am appearing before you as the founder and President of the Connecticut Coalition for Environmental Justice and a founding member of the National Work Group for Environmental Justice Policy, a group of over a dozen environmental justice organizations concerned about chemical policy on the national, state and local levels.

We define environmental justice (EJ) communities as low-income communities and communities of color that are disproportionately burdened with environmental hazards and suffer disproportionately from environmentally related diseases. Environmental justice strives to correct this imbalance while reducing hazards for everyone by changing environmental policies and practices.

Environmental justice communities are deeply impacted by national chemical policies. We have higher rates of environmentally related diseases such as asthma, diabetes, learning disabilities, cardiovascular disease and premature death. This is due to disproportionate chemical exposure during the production, distribution, use, and disposal of chemicals, as well as from legacy exposure to chemicals. H.R. 5820, The Toxic Chemicals Safety Act of 2010, goes a long way toward addressing environmental justice issues throughout the chemical lifecycle.

#### Health protections are based on how people are actually exposed to toxic chemicals

We are encouraged that the bill requires the Environmental Protection Agency (EPA) to set a standard for safety that takes into account aggregate exposure (exposure from all sources) as well as to <u>consider</u> the lifecycle of a chemical and cumulative exposure (exposure from chemicals that have similar health effects). This approach is critically important since the traditionally narrow use of risk assessment has often poorly served EJ communities. This is due to unpredicted exposures and false assumptions included in the assessments. A better approach is to use hazard assessment, which looks at toxicity of any chemical where there is human exposure and tries to reduce the hazard from the chemical rather than reduce the anticipated exposure to a toxic substance.

#### H.R. 5820 offers new hope for "Hot Spot" communities of high chemical exposure

When one looks at the beginning of the chemical lifecycle, chemical production, we find that some environmental justice communities such as Mossville, Louisiana and West Louisville, Kentucky are surrounded by large numbers of chemical plants, including plastic manufacturers. These facilities have needlessly released exceptionally high amounts of toxic chemicals into the air. We refer to exceptionally exposed communities such as these as "hotspots". These "hotspot" production communities have high rates of disease and premature deaths. Unlike Mossville, West Louisville residents have been able to get government to respond to their concerns and establish an area wide air toxic standards program, the Strategic Toxic Air Reduction (STAR) Program. This program has been able to get companies to reduce air toxics by more than 80% in some cases, through modernization and improved maintenance of the facilities.

I believe that these facilities would not have been allowed to perform so poorly in the first place if they were located in more affluent communities. I also believe that these facilities should be converted to producing the safer plastics that the public is demanding by using green chemistry. This would put them in the forefront of plastics production, help preserve jobs, spur economic development and improve public health in these communities.

In Connecticut, we also have a number of mostly small chemical production and formulation facilities. Public health officials are generally unaware of what is being produced at these facilities and what needs to be done to protect public health in the event of a chemical release.

The "Hot Spots" provisions in the new bill are strong and require EPA to name at least 20 communities in the first five years (with subsequent updates), and to develop "Action Plans" for EPA, state, tribal, and local governments to reduce specific chemical exposures from all sources by a date certain or report to Congress why it has failed to do so

In addition to production, environmental justice communities are also at risk due to distribution and storage of chemicals. This is true not necessarily because of increased number of accidents on urban highways and chemicals stored on stationary trains in cities, but because of the large number of people in close proximity who may be harmed when there is an accident.

#### H.R. 5820 will reduce the unnecessary use of toxic chemicals in everyday products

The next area of concern to EJ communities in the chemical life cycle is in <u>use</u> of chemicals. Although everyone is exposed to toxics during normal use of products containing toxic chemicals, urban low-income residents are more likely to be exposed to hazardous chemicals from these products. For instance, leaded wheel weights that are used to balance tires sometimes fall off the tires onto busy roadways where they are pulverized by other cars rolling over them. The lead dust gets into the air where it is

inhaled by local residents. This lead is in addition to lead from chipping and peeling paint in rental housing and the lead from lead containing toys that children may be exposed to. Last year, our organization conducted testing for lead in toys. We observed that toys from discount stores such as "dollar" stores were more likely to contain lead than toys from other stores.

In my neighborhood, there are many small bodegas selling food. These stores do not sell fresh fruits or vegetables so residents are more exposed to Bisphenol A and other chemicals commonly found in canned and processed foods. Again, this is in addition to the BPA exposure that occurs from contact with polycarbonate plastics found in everyday use

#### H.R. 5820 will help detoxify waste disposal impacts by encouraging cleaner products

Another area of environmental justice concern is the disposal of products containing toxic chemicals. The report, *Toxic Waste and Race at Twenty*, released in 2007, documented that EJ communities are still more likely to be located near hazardous waste disposal sites twenty years after the original report. In Connecticut, we burn a larger percentage of municipal solid waste than any other state in the nation. The two largest waste-to-energy facilities in the state, which are the fifth and eleventh largest incinerators in the country, are located in our two largest and poorest cities, Bridgeport and Hartford. The Hartford incinerator burns trash from 69 other communities brought to our city by 300 trucks per day. We believe that the toxic emissions from these facilities are responsible for the 20% asthma rates as well as high rates of diabetes and cancer in the city. Our organization has been involved in educating consumers to use less toxic alternatives in order to reduce our exposure to toxic chemicals.

#### H.R. 5820 will assess safety across the entire chemical life cycle from all sources

The final area of concern in the chemical life cycle that I would like point out is that of legacy chemicals. These chemicals are no longer in use, but are still accessible and poisoning people in environmental justice communities. These include persistent, bioaccumulative, and toxic chemicals (PBTs), such as mercury and lead, as mentioned before, as well as other toxics that are commonly found in contaminated Brownfield properties, such as trichloroethylene (TCE), hexavalent chromium, and polychlorinated biphenyls (PCBs). New Bedford, Massachusetts has two schools built on an old dump contaminated with PCBs. In addition there are about one dozen other sites in the city contaminated with PCBs decades after the chemical was virtually banned under TSCA. Yet public housing residents still complain that their children get rashes after playing in the dirt, which is likely contaminated with PCBs.

Persistent chemicals travel long distances on wind and ocean currents from lower latitudes and accumulate in the bodies of animals and peoples of the Arctic. Some Arctic Indigenous peoples have shown levels of chemicals such as PCBs in blood and breast milk at levels among the highest of any people on Earth. Arctic communities have high levels of PCBs and dioxins in their bodies, partially because of direct exposure from contaminated military and

industrial sites, but mostly because of bioaccumulation of these toxics in their traditional diets of fish, seal, whale and walrus fat carried into the north from hundreds and thousands of miles away-. Levels measured in the traditional foods on St. Lawrence Island, Alaska are exceptionally high. People on St. Lawrence Island are concerned about the high rates of cancer, thyroid disease, and reproductive health problems.

#### H.R. 5820 properly prioritizes action on the worst of the worst toxic chemicals

In H.R. 5820, chemicals of environmental justice concern are handled in two groups. Persistent, bioaccumulative and toxic chemicals (PBTs), such as lead and mercury are required to be reduced to the "greatest extent practical", and then to determine if further steps should be taken to reduce exposure. Other non-PBT chemicals of EJ concern, such as TCE, formaldehyde, and Chromium VI are among the 19 named chemicals on the priority list for EPA to determine their safety and required restrictions. The naming of these chemicals is very important to EJ organizations. Other priority chemicals are BPA, vinyl chloride, phthalates, and perchlorate.

Chemical standards must protect the public and vulnerable populations to a "reasonable certainty of no harm," which is a sufficiently protective standard. The definition of vulnerable population includes disproportionately exposed or potential for disproportionate adverse effects from exposure. It includes infants, children, adolescents, pregnant women and their fetuses, elderly, those with preexisting medical conditions, and others identified by the administrator based on socioeconomic status, race, ethnicity, culturally influenced dietary or other practices. Biomonitoring studies of the public must be done by the federal Centers for Disease Control and Prevention (CDC) or of workers, by NIOSH rather than by the chemical company.

#### Conclusion

In summary, H.R. 5820, if adopted in its current state, will go far in addressing environmental justice issues with chemical policy. We would like to see the bill advance out of committee this year. Thank you for this opportunity to speak, Mr. Chairman. I am available to answer any questions that the committee may have.

Mr. Rush. The Chair now recognizes Ms. Bosley for 5 minutes.

#### TESTIMONY OF BETH BOSLEY

Ms. Bosley. Thank you, Chairman Rush, Ranking Member Whitfield, and members of the Subcommittee.

Mr. Rush. Would you pull it closer to you?

Ms. Bosley. Certainly. I am pleased to testify before you today on behalf of the Society of Chemical Manufacturers and Associates. SOCMA has about 300 members and we make a \$60 billion impact on the U.S. Economy. We also contribute to the chemical industry's status as one of the nation's leading exporters. We are very proud to say that we have an excellent track record with respect to health and safety of our colleagues, our workers, and our communities. We have testified before this Subcommittee before and we have also participated in the discussions that you have had recently on the discussion draft. We commend you for those discussions and believe they improved the draft bill.

On balance, however, we are disappointed that the bill before us today still creates a burden which far—is far out of proportion with the benefit. The burden is not just a matter of profitability. It will deal a heavy blow to a strategic American industry that is already fighting recession and foreign competition. Among its goals for this legislation Congress seeks to and I am quoting here from the bill "assist in renewing the manufacturing section of the United States and ensure that the products of the United States remain competi-

tive in the global market.'

Mr. Chairman, we believe that to the contrary this bill would face—this bill would in fact pose a great competitive disadvantage to the industry and would cause a reduction in manufacturing employment and a shift in our factories to foreign shores would accelerate. The chemical industry already fights hard to compete with countries that have cheaper resources, lower wage standards, and more lax regulation. We don't have to look far to find examples of public health concerns about tainted food or lead in children's toys as we have already heard about. That is the risk of encouraging manufacturing to migrate from our shores and far away from the protections of robust American regulation. Congress recognizes the importance of innovation and U.S. competitiveness as well as in achieving the aims of the bill through continual evolution towards safer and less toxic chemical substances.

The U.S. chemical industry leads the world in research on approved manufacturing process and safety advancements to minimize the impacts of chemicals on human health and the environment. It is important, more important than ever that we maintain our lead on innovation. Chemistry as an enabling technology allows other industries such as aerospace, electronics, and advanced materials to be cleaner, greener, and more competitive, and it is not enough to do the product innovation in the United States. We need to do the manufacturing also. Here I am quoting Matt Miller of the Center of American Progress. Miller quotes former Intel CEO Andy Grove who says manufacturing is the only way to gain the handson experience with products that leads to all subsequent innovations. Surrender the manufacturing and you lose this virtuous cycle.

Speaking for the members of SOCMA we are concerned that the burdens created in H.R. 5820 will indeed drive innovation and manufacturing from our shores. The following points highlight our major concerns and recommendations. For many industrial chemicals the safety standard in this bill creates a new burden without a benefit. The standards we use to regulate drugs which are intended to be bioactive, and food additives, which are intended to be consumed, should not be the model for how we regulate industrial chemicals. These chemicals often serve only as contained intermediates during the production of other products. The bill as written would impose unnecessary burdens and cost even on low risk, low volume chemicals. New chemicals and new uses would be subject to a yearlong review which would discourage the introduction of new chemicals and new applications of existing chemicals into the marketplace. The current new chemicals program which involves a 90 day review has generally received broad support.

Through this program EPA has successfully reviewed 45,000 new chemicals protecting and informing the public without impeding the innovation that is crucial to American competitiveness. EPA's use of models in the evaluation of new and existing chemicals should be encouraged since they have proven to be an accurate and efficient alternative to animal testing. An important—an improvement to the new—current new chemicals program would include modifying the approach to CBI such that the use of PMN data isn't permitted within EPA to review other new chemicals and as well

as existing chemicals.

Based on yesterday's revision that we received of the bill, it appears that Congress intends to eliminate mixtures from review under section five. We support this revised approach since the inclusion of mixtures would present an extremely high burden for the industry and for EPA for mixtures that may not even have a risk. But we need to study the implications of the narrow redaction of mixture language before commenting further. H.R. 5820 has no preemption of state regulation regarding chemicals on which EPA has already reached a safety determination. Congress should consider a preemption to avoid disruption of interstate Commerce from potentially conflicting state laws. Protection of American intellectual property is weakened by this bill. By disclosing chemical identity in all health and safety studies, we in effect hand our innovation to foreign competitors with a long history of low quality copycat products. It is possible to fully inform the product—the public about health and safety information without publicly disclosing proprietary aspects of a particular chemical. This reflects our broader recommendation that EPA should be made the agency charged with making unbiased science based safety determination regarding chemicals. Let me be clear. SOCMA members are passionately committed to the public health, the protection of public health and the environment. We believe its legitimate role of Congress to weigh economic impact such as potential job loss against policy objectives. However, we respectfully contend that the government must avoid creating an unnecessary burden as would be the case with H.R. 5820. We understand the complexities associated with modernization TSCA and believe our chemicals policy goals can be accomplished in a way that does not devastate a strategic American industry. Thank you for the opportunity here and I would be happy to answer any questions.
[The prepared statement of Ms. Bosley follows:]



Society of Chemical Manufacturers & Affiliates

Testimony of Beth D. Bosley

President Boron Specialties

On behalf of the

Society of Chemical Manufacturers & Affiliates

Before the

U.S. House of Representatives

Energy and Commerce Committee Subcommittee on Commerce, Trade, and Consumer Protection

On

"H.R. 5820, the Toxic Chemicals Safety Act of 2010"

July 29, 2010



Good morning, Chairman Rush, Ranking Member Whitfield, and members of the Subcommittee. My name is Beth Bosley, and I am the President of Boron Specialties in Pittsburgh, Pennsylvania. I am pleased to testify before you today on behalf of the Society of Chemical Manufacturers and Affiliates (SOCMA) regarding H.R. 5820, the Toxic Chemicals Safety Act of 2010.

Since 1921, SOCMA has served as the leading trade association representing the batch and custom chemical industry. SOCMA has roughly 300 member companies, which are typically small to medium-sized businesses, each with up to \$100 million in annual sales. Our members make a \$60 billion annual impact on the U.S. economy and contribute to the chemical industry's position as one of the nation's largest exporters.

SOCMA has testified before this subcommittee numerous times on modernizing the Toxic Substances Control Act (TSCA) and most recently participated in the discussions led by Chairmen Rush and Waxman on major provisions of the draft version of this legislation that was released this past April. We commend you for convening those discussions, and believe they did produce some improvements from the draft bill, such as requiring varied or tiered testing, restoring the articles exemption from the definition of "chemical substance," and slightly improving the treatment of mixtures. On balance, however, we are sorry to say that the bill before us today is still overreaching and unworkable. It would have a substantial negative impact on a strategic American industry that is already fighting recession and foreign competition.

The US chemical industry's competitiveness has continued to decrease substantially in recent years due to competition from countries, like China and India, with lower resource costs, lower wage standards, and a less burdensome regulatory environment. As written, H.R. 5820 poses overwhelming challenges for the industry and substantive loss of high-paying manufacturing jobs will result.

At the moment, the US still leads chemical industry innovation: of the roughly 60,000 patents attributable to chemical sciences issued over the past 5 years, 35,000 of them are authored by US entities. The US industry also leads the world in research and development of new chemical substances, better manufacturing techniques, and process safety advances designed to minimize the impact of chemicals on human health and the environment.

Still, it is more important than ever that we maintain our competitive edge as innovators. We should look to innovation as an enabling technology, that promotes "greener" chemistry and benefits many other US industries – aerospace, advanced materials, agriculture, pharmaceuticals, electronics, and telecommunications (among many others) – making these industries better able to compete in the increasingly global marketplace.

And "it's not enough to do the product innovation in the United States; we need to do the manufacturing, too." Here I'm quoting Matt Miller of the Center for American Progress, from an Op-ed in last week's Washington Post. Miller quotes former Intel CEO Andy Grove, who says manufacturing is "the only way... to gain the hands-on experience with products that leads





to all subsequent innovations. Surrender the manufacturing and you lose this virtuous cycle."1 I'm gravely concerned that the system that H.R. 2860 would create would indeed drive innovative manufacturing from our shores.

#### TSCA Should be Modernized in Ways that Do Not Seize Up the Engine of Innovation and Kill Jobs

The following points highlight a few of our major concerns:

- · The safety standard in this bill is inappropriate for industrial chemicals. The standards we use to regulate drugs -- which are intended to be bioactive -- and food additives which are intended to be eaten -- should not be the model for how we regulate industrial chemicals. Exposures to industrial chemicals outside the workplace are generally many orders of magnitude lower than those to drugs or food, because these chemicals often serve only as intermediates during the production of other chemicals. Narrowly defined uses, like those of food additives and drugs, are inherently easier to regulate. But uses of industrial chemicals are not going to be so readily identifiable, and exposures will be difficult for the manufacturer to measure throughout the supply chain. With this bill, as written, even low risk chemicals would face major roadblocks to market entry.
- New chemicals and new uses would require an unnecessary increase in testing and reporting, and would be subject to a year-long review, discouraging R&D and the continued introduction of new chemicals, or new applications of existing chemicals, into the marketplace. The new chemicals program under the current law - which involves a 90-day review - has generally gotten broad support and that support should not be overlooked. Through this EPA program over 1,000 chemicals undergo a review every year. EPA has successfully reviewed some 45,000 new chemicals since 1979 under the PMN program without impeding the innovation that is crucial to American competitiveness. From the experience of reviewing so many molecules, EPA has acquired a vast amount of knowledge that it can build off in reviewing additional molecules. Further, the agency should continue its history of strong support for the creation of models for the evaluation of new and existing chemicals.
- The inclusion of mixtures in the new chemicals program would cause EPA's workload to skyrocket and burden our industry by requiring a massive increase in paperwork generated for submittal to the EPA for mixtures containing chemical substances that do not have an identified risk. In fact, this expansion will overwhelm EPA and disadvantage US industry. As an example illustrating the difficulty, EPA's Office of Research and Development has been unable to develop an accepted risk assessment methodology for even a simple two-component pesticide mixture (carbamates and pyrethroids), though it has been a stated goal for quite some time. TSCA reform should emphasize the need for continued research, but should not tie EPA's hands by requiring something that is not possible using currently available robust scientific methodology.

<sup>&</sup>lt;sup>1</sup> Matt Miller, "The Great Recession is Just Beginning," THE WASHINGTON POST (July 21, 2010); available at http://www.washingtonpost.com/wpdyn/content/article/2010/07/21/AR2010072103052.html.



- . H.R. 5820 has no state preemption for chemicals for which EPA has concluded the exhaustive review that the bill envisions. Without some kind of preemption, a serious potential for disruption of interstate commerce will remain from a growing patchwork of
- Protection of American intellectual property is insufficient. By disclosing chemical identity and components of a mixture in all health and safety studies, we will simply promote foreign undercutting of our industry. We have witnessed China develop many offshoot products using stolen proprietary information, and see no need to facilitate this. As a rule, it would not be necessary for the public to know a chemical identity in order to understand health and safety information about a particular chemical. EPA should remain the agency charged with making safety determinations regarding chemicals, and Congress should not enact a presumption that EPA's review will be inadequate and require second-guessing by NGOs or others.

We understand the complexities associated with modernizing TSCA and believe our chemicals policy goals can be accomplished in a way that does not devastate a strategic American industry, but does enhance public confidence and protection of human health and the environment.

I thank you for this opportunity to share our perspective on this bill and some of its potential consequences, and would be happy to answer your questions.

Mr. Rush. The Chair indeed thanks all the witnesses. And now it is time for the questioning of the witnesses by members of the Subcommittee. And for that purpose the Chair recognizes himself for 5 minutes for the purposes of questioning the witness. And I will begin with Dr. Denison and Mr. Williams.

And my question to you is, Dr. Denison, you said in your testimony that H.R. 5820 will spur innovation and protect American jobs. Can you explain in light of your statement, and in light of some of the testimony we have heard today some of the exact feelings expressed-in your expounding in your statement in light of some of the anxiety that has been expressed about the bill's potential impacts on job retention and creation. Can you express-expound on your position on the retention and creation of jobs in regard to this bill?

Mr. Denison. Yes. Mr. Chairman. Thank you. The U.S. has fallen well behind much of the rest of the world in its chemicals policies and practices. And I think that one of the things that this bill will do is to raise the standards in the U.S. to those of other areas of the world including the major markets of the chemicals industry. The motivation behind the improvement in those standards in other parts of the world has been as much to promote sustainability and create a more sustainable chemicals industry as it has to protect health and the environment. And I fear that the industry in this country right now is in a similar place to where the auto was a decade or more ago where it fails to recognized where the rest of the world is going and where its own markets are going. We need to have therefore, an industry that is driven toward innovation, yes, but innovation that includes safety as a critical, central element of that innovation. I couldn't say it better than a member, a representative from DuPont, one of ACC's companies that said in response to the REACH regulation in Europe that they would they as a company that invested heavily in R and D and innovation saw REACH as a business opportunity to innovate the new chemicals that would be restricted under REACH, and be out ahead of the current in terms of creating the jobs, and creating the new products that will satisfy the growing demand globally for safer chemicals.

Mr. WILLIAMS. Chairman Rush, to answer that question from my viewpoint, seven years ago when I began doing as much research as I could on this subject, I found in answer to a Google search how many people in America will buy environmentally preferable products. At the time and it is somewhat a smile to the face, it was approximately seven percent. And the person that put that information together said it is roughly equivalent to those who will vote for Ralph Nader is a Presidential Election. Today similar research says it is approaching 58 percent. Two years ago McGraw Hill did a smart reports survey where they said that environmentally preferable building products had reached the tipping point. We are an international company. We know that when we can put our products from here into the UK and into Europe where the buying preferences are to have environmentally responsible product and most especially the word you hear more often in Europe is PVC. You hear it, but you also note that they are not currently buying materials that are free of PVC. Our materials here that we are able to

put together are preferable not just here in the United States, but also in Europe. And I think the definition of green jobs needs to change. I recently received a survey, fill this out; help me understand green jobs for Pennsylvania. I cannot answer that survey by answering the questions. I am going to have to footnote that survey because it talks about solar, it talks about renewable energy. That is such a limited view. We as a company are putting our products out into an architectural market that is asking for environmentally preferable products and responsible products. And they are reaching toward us and pulling that product almost literally off of our shelves. They are green jobs that we are adding every day to our business. And as the businesses in Michigan, and as the businesses in other states supply us with product, green jobs that are heretofore defined as different jobs, less defined as green jobs. These jobs are growing on a day to day basis here in the United States.

Mr. RUSH. Thank you. Dr. Mitchell, your organization defines environmental justice communities as "low-income communities and communities of color that are disproportionately burdened with environmental hazards and suffer disproportionately from environmentally related diseases." Do you agree that this legislation will mark a tremendous step forward in restoring public trust in the American chemical industry and in EPA's ability to protect human health and the environment, and do you think that this bill will go a long way towards correcting some of the issues that are found in

hotspots across the nation?

Dr. MITCHELL. Absolutely, Mr. Chairman. I think that people expect that government is going to be protecting them. When they go into a store and buy things off the shelf they expect that they are going to be safe. And they don't know that there is a safe product right next to a more dangerous product. For example, if you are looking at cleaning products. I think that this legislation will help to take more dangerous products off of the shelves, you know when there is a safer alternative. And also people will know what is in the products that they buy, and I think that that is very, very important. And environmental justice communities, you know we are very concerned about that and also we sort of put our members at risk. For example there are companies that are suing communities that are interested in finding out about the health effects of their violations, of their state violations of contracts specifically like in Mesquite, New Mexico. You know Helena Chemicals is suing the company. I think that that won't be necessary under this new bill that if government really can protect the public, I think that that will be very helpful.

Mr. Rush. That concludes the Chairman's time. Chair now recognizes Mr. Whitfield for 5 minutes.

Mr. Whitfield. Thank you very much and thank you all for your testimony. I noticed that one of the findings in this legislation relates to creating jobs that this legislation can help create jobs. And Mr. Williams you eluded to that and I think Dr. Denison, you indicated that the chemical policies and practices in the U.S. were not as progressive as they were in the rest of the world. And the point that I would make is if we were creating all these green jobs, then why is our unemployment rate still at almost 10 percent? And why is the unemployment rate in most countries in Europe greater than

in the U.S. if what you are saying is this kind of progressive legislation will be creating jobs? Now that is a little aside to the real purpose of this legislation, but I don't think we should be trying to sell this legislation on the fact that we are going to create a lot of jobs with this legislation. Mr. Dooley, is this legislation, do you expect this legislation to create jobs in your—in the members of

your association?

Mr. DOOLEY. No, absolutely not. And we are absolutely convinced that it would result in a significant reduction and the ability of the U.S. manufacturers and the chemical industry to continue to be the international leader at bringing new innovations and new products and maintaining our manufacturing base here in the United States. And you know I find it remarkable that Mr. Denison would say that somehow the U.S. chemical industry is falling behind. In the United States last year one out of every 10 patents that was issued in this country was issued to the chemical and chemistry industry. We are by far the leader of any chemical industry internationally in terms of the new innovations that we are bringing to market. When we see a consumer demand for a safer alternative, it is going to be our industry that is going to be the forefront in meeting that consumer demand. And when you look at the provisions in this, when you look at the safety standard that would require somebody that might have a new, maybe it is an advanced solar cell that has a chemical that just might be on the—subject to a safety determination, before they could bring that, you know, green product that could increase our energy efficiency and energy security, they would have to go out and identify every other product in the marketplace that had that same chemical in it. They would also have to analyze every ambient exposure to it be in the air, water, and soil before they would even have the chance to demonstrate that they could meet that reasonable certainty of no harm. If you think that this is somehow going to create jobs in the United States, I would beg to you to come and visit the industry and understand how it works, let alone the new chemicals provisions which would also we thing would thwart and impede the development of new products and new jobs in this country.

Mr. WHITFIELD. Ms. Bosley, do you think it would create new

jobs in the—your members?

Ms. Bosley. No, I can give you an example of—so in everybody's car there is a piece that connects the roofing to the frame. It is a plastic piece that is not very long. There is about 19 chemicals that go into that singular piece. 13 of those chemicals are hazardous to some extent and they are all as you might imagine low margin chemicals. We live in the reality of a market economy, and you make what you can make for the price that the market is willing to pay for it. If those chemical companies are going to have to go back and do the increased burden of 5820, there will be no margin left for them. So now not only have you lost the jobs associated with the manufacture of those 19 chemicals, you have lost the polymerization jobs, the extrusion jobs, and now that piece is going to come into the country as an article which is beyond the reach of EPA.

Mr. Whitfield. Well, you know this points out that we do have to have a balancing act here, because yes, we want safe products.

We want to make sure the chemicals are safe, but we don't want to damage our economy particularly at this point in our nation's history where we are struggling to come out of a down economy. So and I noticed that in this legislation they abolished the unreasonable risk standard and least burdensome method to proceed, so that they consider—do not consider particularly the impact on jobs per say, which I think realistically at least have to think about.

Well, I see my time has expired.

Mr. Denison. Congressman, maybe I could respond to Mr. Dooley? I do think there is a fundamental misunderstanding of the bill. He said in his oil statement and again just now that somehow company—an individual company would have to go out and assess the exposure not only to their use of the chemical but to everybody else on the market. That is a fundamental misunderstanding of the—that is a role for EPA under this legislation, not for an individual company to do those assessments. I just want to set that

Mr. Dooley. Mr. Chairman, if I can respond to that is our reading of the legislation it is a clear statement that the burden of proof lies with the manufacturer. When you look at the safety standard and the obligation to assess aggregate exposures to a chemical that is bringing into the market, in no way does it state clearly that that is the responsibility of EPA. Now if that is the intent of the authors, then that is something that we would be more than pleased to work with you. But as we read the legislation today, that is a burden, and an obligation, and a responsibility on

the industry.

Mr. Rush. The Chair now recognizes Ms. DeGette for 5 minutes. Ms. DeGette. Thank you, Mr. Chairman. You know, Mr. Dooley, when we served together in Congress I never disagreed with you. I think that is about to change I am sorry to say. I want to talk for a minute about this issue of the manufacturers' burden. Because what you have been talking about is that you think that industry has the burden of showing with reasonable certainty that all aggregated exposures from the use of the chemical pose no harm. Right? Yes, OK, but take a look at—well I don't know what section it is—it is, I will get you the exact reference. It is on page 44 of the draft legislation, a manufacturer is only responsible for showing reasonable certainty of no harm for a chemical's intended use. And industry would not have to conduct studies considering all exposures to a chemical. So would you agree that a standard based on intended use would not require companies to prove that all uses and exposures are safe? You need to turn your microphone on, Mr. Dooley.

Mr. Dooley. There are other sections of the bill when you get to the safety standard and what it would trigger. It was subject to that is that the intended use isn't the trigger is that if you have the intended use that has that chemical in, as we have read and interpreted it will result in the obligation for the assessment of all other aggregate exposures.

Ms. Degette. Mr. Owens, do you—is that the intention with this legislation?

Mr. OWENS. Representative DeGette, we didn't draft the bill, so I can't really speak on what theMs. DEGETTE. OK, well, I mean is that your interpretation then

of the draft legislation?

Mr. Owens. Well, I think that—let me put it this way. The way that that standard has worked for example it is a standard that is used as Dr. Denison said and others have said in our Food Quality Protection Act we evaluate pesticide potential exposures with reasonable certainty of no harm standard and we at EPA evaluate the aggregate exposures when we are making that safety determination. Now whether that is how this is written, I know our lawvers are still looking at it at our agencies, so I can't really say right now what their conclusion will be. But that is how we have done

Ms. DEGETTE. And Mr. Dooley, I will tell you that what I just said is our intention, too, so if we need to work together on fixing this language we are happy to do that, but that is our intention. I wanted to ask you, Ms. Bosley, in your written testimony and you referred to this also today in your oral testimony. You said the U.S. chemicals industries competitiveness has continued to decrease substantially in recent years due to competition from countries like China and India with lower resource costs, lower wage standards, and a less burdensome regulatory environment. I am going to assume that it is not your organization's positions that we should decrease wage standards and decrease the regulatory environment in the United States. That is not your position, is it?

Ms. Bosley. Certainly not.

Ms. DeGette. And I would also ask you, I would think that your organization would also believe that we need to renovate TSCA for this new century. Correct?

Ms. Bosley. We do.

Ms. DeGette. And also, Mr. Dooley, your organization would think the same. It is not that you oppose re—you know fixing TSCA for this new environment that we have now. Right?

Mr. DOOLEY. No, we have made this one of our highest priorities. Ms. DEGETTE. Right, you also, and in fact both or your organizations have been at the table during the negotiations, so I have a— I want to ask both of you this question.

Mr. Dooley. I would—I would put negotiations in parenthesis. I wouldn't necessarily characterize the discussions as negotiations. Ms. DEGETTE. OK, well, here is my question to you. Is—what

safety standards does your organization recommend that we adopt?

Mr. DOOLEY. We would think that we could learn some terrific lessons by looking at what Canada has done in the past couple of years and instituting a reform that their chemical management system which is very similar with the concepts that we have developed out where you would develop, you would prioritize the chemicals based on reason with those we should of greatest concern.

Ms. DEGETTE. So you think the Canada standards would be ap-

propriate standards for us to look at?

Mr. DOOLEY. That the Canada scheme and their system would be much more I think appropriate in terms of prioritizing the chemicals based on the risk of exposures and then adopting a system where you would determine how you can manage those risks for those products as they are put into the marketplace for their intended use.

Ms. DEGETTE. Thank you. Ms. Bosley, what standard would your

organization at safety standard?

Ms. Bosley. I would agree. We have—we are a proponent of Canada's system also and I might say is the first thing Canada did was to put their arms around the exact number of chemicals in Commerce. Canada has a similar number of 75 or 85,000 chemicals that were on a list called the DSL. They through polling of industry they paired that list down to 23,000 chemicals that were actually in Commerce. Some of the chemicals were no longer manufactured, or imported into Canada. Many of the chemicals were no longer manufactured. When they had that list of 23,000 they were having a much better area in order to prioritize that list and require a different base set of testing depending on the highest priority chemicals.

Ms. DEGETTE. Dr. Denison, could you just respond to these sug-

gestions by Mr. Dooley and Ms. Bosley?

Mr. Denison. Certainly. I applaud what Canada did. As a very small country with a tiny percent of the global chemicals market and the vast majority of those chemicals being imported rather than produced there it made sense for them to do what they did. But it is far away from being a proper model for the United States of America. In fact, they—their process was hampered enormously by the enormous data gaps that led them not to be able to even classify thousands of chemicals against the criteria that they used to prioritize chemicals. Moreover, they found that many of the chemicals, in contrast to what Ms. Bosley said, they only actually started with 23,000 chemicals. They didn't have 75,000 chemicals. We have a much bigger problem on our hands, and we need a much more systematic solution that speaks for the fact that we have a major part of the global chemicals market.

Mr. Rush. The Chair recognizes Dr. Gingrey for 5 minutes.

Mr. GINGREY. Mr. Chairman, let me address my first couple of questions to Mr. Cook. Mr. Cook, industry witnesses have expressed concern that if this bill passes as it is written it will drive innovative manufacturing outside of the United States and indeed kill high paying American manufacturing jobs. Do you have any concerns that the global environment could suffer if we force this type of manufacturing to countries with much less robust or even indeed nonexistent environmental controls?

Mr. Cook. I would be very concerned if that were to be the case, Congressman. There is no question. I was surprised to hear it brought up by my colleague at the table that the industry is already losing jobs. We are already shipping jobs overseas not because we have toughened our regulatory standards, of course we have not done anything for 30 years, but simply because it is cheaper to do business over there. That is where our chemical industry is going.

Mr. GINGREY. Well, excuse me, Mr. Cook, but you say not because of regulatory standards. These regulatory standards that we are talking about in this bill are not inexpensive. Let me shift real quickly. I will come back to you because this issue of jobs is real important, certainly real important to our side of the aisle as you can tell from the questions. Mr. Williams, I think in your either response to a question or maybe your testimony, you said that green

jobs would come out of the State of Michigan? Are you talking about Flint or Detroit? Where exactly in Michigan are you talking about that we are going to grow green jobs?

Mr. WILLIAMS. OK, what I was talking about the growth of green jobs were as our product demand rises, our supplier in Michigan

produces more product and hires more people to-

Mr. GINGREY. But Mr. Williams, how long do you expect that to take? The people in Michigan are suffering pretty badly right now,

Mr. WILLIAMS. I am sure they are and candidly I am on your side of the aisle. I was pleased as a conservative Republican Central Pennsylvania a county that goes Republican in every election to be able to come here and to be able to speak because I do think we share a tremendous number of same beliefs and values in job cre-

ation here in America. I don't want to see that go-

Mr. GINGREY. Yes, sir, I understand. Of course, these are not political questions. We are just talking about what is good for the country, whether Republican or Democrat. But let me shift back to Mr. Cook, because I had another question for him. In the conclusion of your testimony you state and I quote, "The federal government must place a greater emphasis on biomonitoring of cord blood." Then you also state that, and this is a quote, too, "detection of a chemical in umbilical cord blood does not prove that it will cause harm." Well, last November the CDC stated on the record before this Subcommittee that our ability to detect chemicals through biomonitoring, and this is their quote "is exceeding the ability to actually determine whether health effects are occurring." So, why then should the federal government devote more resources, a tremendous amount of resources to an enormously expensive procedure that you state isn't an indication of health risk and the CDC states isn't offering an increasing rate of return on health risk? This cord blood monitoring.

Mr. Cook. That is an excellent question, Congressman, thank you, and a couple of points. First of all the CDC is continuing to do extensive monitoring precisely because they know that the raw material for the decision making process that you need to start figuring out some of these health effects and some of their impacts is biomonitoring information. In my case I don't think anyone should argue that because you are exposed to a chemical means that you are going to come down with the disease or illness that might be indicated by animal studies. But we find that as the American people have waited, and waited, and waited some more for the government to do anything to protect them by modernizing this law, they want to know what they are being exposed to so that perhaps they can take some steps on their own while the govern-

ment is making up its mind.
Mr. GINGREY. Well, yes, and it is just like Dr. Mitchell was saying about the importance of designated areas across the country of hotspots. First thing you know these folks that are working, and living, and maybe employed at these companies that the manufacturing companies, chemical manufacturing companies they are going to think they are living a super fund neighborhood. And Ias I said in my opening remarks I think we are scaring the heck out of everybody. Let me make one last quick question, Mr. Chairman if you will bear with me because I did want to shift back to our former colleague Cal Dooley. You had some props there and you held them up and one of them was a Blackberry. How many of your props would meet safety standard under this bill? And for the sake of argument, assume that they don't. Under this bill, how long would it take to get a comparable alternative pilot to the market?

Mr. Dooley. Excuse me, thank you again. Based on our intent and interpretation if they were in fact subject to the safety determination is that we quite frankly don't know if we could gather the information on the aggregate exposure that would allow EPA to make a determination whether or not we could bring that to market. We don't think we could get there. And the problem is with a new chemical you are saying how long will it take us to develop a new chemical? Well, you have all the R and D that is going into that as well, but then you have to then before you can bring that chemical to market you are going to have to make the investment, too, on the data that is going to be required. We look at that as probably being in the ball park based on our experience with the data we have been providing on the HPV program at EPA to be probably in the million dollar range. Then you have to wait another year for EPA to make-maybe make a determination on whether or not that product is safe to bring to market. So you are, you know, you are probably looking at a minimum of two to three years before even an alternative could even be available to come into the market.

Mr. GINGREY. Thank you, Mr. Dooley. Mr. Chairman, I yield

back, thank you.

Mr. Denison. Can I reply briefly to that, Mr. Gingrey? I do think that this is not a standard that has come out of space, dropped out of space. We have had this standard in place in the pesticide arena for 14 years and 9,000 pesticide tolerances have been reviewed under that standard. The majority of which remain on the market today. They met the standard. And it required aggregate exposure assessment. Now I am not saying that standard gets moved over without any adjustment, but it is not as if we are starting out from scratch here.

Mr. Dooley. You know I must say before I came to Congress I was a farmer. And I used a lot of pesticides. I was in Congress when we put forth these regulations that Richard just mentioned in that this is a standard. But people need to understand is that on a pesticide you have a limited set of uses. It has to be registered for a specific number of crops that it could be applied to. There is a defined universe of exposures that an individual is going to encounter. It is easy in those situations to identify the aggregate exposure. When you look at a chemical, like it might be polysilicon it could be used in a thousand different applications and products. It could have different pathways of entry into, you know, of through those exposures. And the difference between a pesticide and why you might want to have a different standard there is that they are meant to be consumed. You are all going to consume them in the vegetables and the products you eat. You are not going to be eating a solar cell. You are not going to be eating your Blackberry. It has a much less of a level of risk of exposure, and that

is why it should have a different standard of safety than what we are using in the pesticide industry.

Mr. Rush. Mr. Cook, do you want to respond?

Mr. Cook. We were heavily involved in the development of the Food Quality Protection Act idea. Point number one is this if I may borrow that, Cal. I prefer I Phones, but then again, your microphone works, so this ought to be as safe as a pesticide. That is all we are saying with no reasonable certainty of no harm, and when the agency determines that this product's packaging is safe then it is very unlikely that the next manufacturer coming along is going to trigger the safety standard and require years of review. So I just think it is—I disagree with my friend, Cal on that particular point. I believe as Richard has suggested, Dr. Denison has suggested, some chemicals are not going to make it under your law. If—when it becomes law. A very large number, probably most are going to meet the safety standard with modest changes. If it is a chemical that ends up in this, Dr. Gingrey, then I think—and we know that because we have looked, then I think stepping back we will say, well, if it meets the safety standard is it likely that more exceedances, more products will cause it to exceed it. I think the agency will be in a good position to say yes, or no without having every company that is trying to use this same plastic going through an elaborate exercise. So I think it can be very workable. And I think if we set the standards so that we reward R and D, if as Dr. Denison said innovation comes to embrace safety, we will be creating jobs here that our competitors overseas who don't invest in R and D won't be able to meet. But if we don't, if cost, and price, labor is the only consideration our jobs are going to keep going overseas.

Mr. Rush. The Chair now recognizes the gentleman from Mary-

land, Mr. Sarbanes for 5 minutes.

Mr. SARBANES. Thank you, Mr. Chairman, thank you for your dogged determination to make sure we reform this statute and have the right kind of safety measures in place. I, as you know, I strongly support the legislation that has been introduced and was glad to be a co-sponsor of it. I think again as I have said every time I get the chance on this matter, the average American listening to this discussion would be amazed at how little we know about so many chemicals that are out there in the stream of Commerce. And frankly, must view it as an abdication of the responsibility of government to act on their behalf to protect them. So I would have like to have seen even stronger of provision perhaps in this. I am very happy with what is in it, and I am incredulous at industry's insistence that this is going to compromise them, handicap them, whatever phrase you want to use. I have boundless confidence that the chemical industry will figure this out and keep right on going. And I also understand just on the last point that was made by Mr. Dooley about how long it would take for certain things to happen. My understanding is that there is a faster track that can be pursued for looking at safer alternatives in some instances and so forth. So I just believe you are going to be able to assimilate these new requirements and frankly there is two dimensions to this. There is the consumer protection piece which I think is the—my first motivation. But there is also I think the opportunity for the business community to profit from having these new regulations in place. We are hearing all this stuff about how it is going to undermine jobs and so forth. I actually think it is going to improve the prospects of businesses that manufacture products that have these chemicals in them and I will tell you why. The more the public becomes aware of the fact that there is a lot of these chemicals out there that nobody really has a handle on, I think the more—and I don't think it is because of alarmism, I think it is just their own educated perspective. The more concerned they become about using these products whether it is because they are concerned about their children's health or they are concerned about their own health. I mean frankly I have started to try to minimize my—I mean it may be having an impact on the way our house looks, but I am trying to minimize the use of cleaning products in my house because I don't know, and that is what is really—what is in those products. So people are going to start reacting to the information that is out there that there not being enough oversight in place with respect to these chemicals. And I think it is going to harm the businesses and the industries that deliver those products to the public. And if we can restore confidence that these products have gotten the right kind of look and that the chemicals that go into them have been determined to be safe, et cetera, I think they are going to be more likely to want to purchase those products and it is going to be better for business. Now I just wanted to ask Mr. Denison getting back to this narrative about the bill hampering innovation, shifting production to developing countries, and so forth. When you look at regulation in the U.S., and Canada, and Europe, and so forth do you subscribe to the notion that having this TSCA reform in place is going to significantly undermine U.S. innovation and competitiveness?

Mr. Denison. Congressman, I do not. I think there is a very strong record of better regulation spurring innovation and providing industry with a certainty as to what its targets are for meeting those regulations, and for meeting consumer demand that is based on them. I think you are absolutely right to point to the consumer confidence issue. In fact, ACC's decision to embrace modernization of TSCA was based on large part on their concern that the consumers were losing confidence in the safety of their products. We have to have real reform in order to restore that confidence. And that means we have got to have much better information, but we also have to have a government that is able to act on that information. And that doesn't mean weakening the safety standard. If Ms. Bosley is right, then many of her—of SOCMA's chemicals are intermediates with very limited exposure. Then they will pass the safety standard that much more easily. That is not a reason to lower the standard and to put U.S. companies at a disadvantage to other parts of the world that have those higher standards. So I totally reject the notion that a stronger regulatory program will impede innovation. It will spur it.

Mr. SARBANES. I appreciate that and I just have run out of time. I will just close by saying I think industry can really step—the government and industry can partner around good strong standards and take this thing to the next level. Everybody is going to come

out the better for it, industry and the public. So with that I yield back.

Mr. Rush. The chair now recognized the gentleman from Penn-

sylvania, Dr. Murphy for five minutes.

Mr. Murphy of Pennsylvania. Thank you, Mr. Chairman. Thank you to the panel. I would have many of you to know that I believe at the beginning of the 20th century life span was about 45 years or so. By the end of the 20th century it has reached 70 some years. Does anybody know why? Any guesses? Dr. Mitchell, do you have anything?

Dr. MITCHELL. Yes, the major thing that happened is public health and prevention, you know, especially water, sewer, public

sanitation all those things.

Mr. Murphy of Pennsylvania. But, of course, chlorine is toxic. I don't know if anybody's abdicating we stop chlorinating water. Any of you doing that? Here is a question I had, too. Mr. Williams, I had to step out of the room during your testimony. I read it and I am really impressed with new building designs and new building materials particularly ones that avoid carcinogenic materials. I want to ask you if in the materials one uses in buildings, too, do you also look at paints, and the substances that might reduce mold risk as positive factors there?

Mr. WILLIAMS. That is not, we don't manufacture products of

that type.

Mr. Murphy of Pennsylvania. I mean use them. Do you use them in buildings or do you recommend them?

Mr. WILLIAMS. Only in our own buildings.

Mr. Murphy of Pennsylvania. OK.

Mr. WILLIAMS. And——

Mr. Murphy of Pennsylvania. Can you give us reasonable certainty that there is no harm will result from use of those?

Mr. WILLIAMS. I am not familiar with paints.

Mr. Murphy of Pennsylvania. There is also a lot—there is a concern that more people die from diseases they did not have when they went to the hospital than by diseases they went to the hospital for.

Mr. WILLIAMS. They are socomial, yes.

Mr. Murphy of Pennsylvania. They are socomial infections or a wide range of those. We know that a lot of paints are being developed now. A lot of antimicrobial paints, a lot of antimicrobial clothing to reduce the risk of that, so for you and for Dr. Mitchell, somewhere in here there may be a payoff. Some of these are treated with silver and one can have silver toxicity. Some have a certain level of nanoparticals including zinc. Zinc is pretty toxic, too, and so the question is given that no socomial infections affect about two million people a year cost \$50 billion of health care system that kill about 100,000 people a year, can either of you give me some certainty that no harm will result from using or not using these?

Mr. WILLIAMS. First of all we at one time researched and began to use an anti-microbial within our product. A couple of points to that. Research has shown for years that the vast majority in perhaps from the 95th to 98th percentile of all known socomial infection is caused by procedures and by health workers failing to wash

their hands. If you look at facilities today you will find numer-

Mr. Murphy of Pennsylvania. Sure, but though I might had I have worked in hospitals for 30 years, but I also know that someone washed their hands, they could touch their clothing, they could touch their tie, touch a pen, touch a stethoscope, touch a doorknob, and when surfaces are coated they may produce it, but the point it when you wash your hands your are also using chemical agents which can be toxic.

Mr. WILLIAMS. Right, well, what-

Mr. Murphy of Pennsylvania. Also saying one of those which can be very toxic, but you know the common use is to wash your hands. Because you wash your hands a lot all day does that end up with other problems? And my question is you are providing valuable information. My question is where is the line here in terms of trying

to help this?

Mr. WILLIAMS. Well, what we found is as we began to think we had a good product that at the time was using an additive for antimicrobial we found that in order to raise the content level sufficient to kill in a time frame that someone else then wouldn't come touch, we stopped using the product because we realized we would virtually have to have a sign on the product that said please don't touch for four and a half minutes while anti-microbial kills. And that was the difficulty with that although there are a great number of antimicrobials out there we are also seeing that health care leaders such as Kaiser-Permanente is refusing to use products with antimicrobials in them. A lot of this is a market driven issue from the manufacturing and a marketing company. We thought we had the right stuff with the antimicrobials.

Mr. Murphy of Pennsylvania. So if they are not using them are

we going to be developing new ones?

Mr. WILLIAMS. No, I think the thing is they are not using them because of the toxicity at the level at which they would kill as opposed to base product-

Mr. Murphy of Pennsylvania. Well, my concern is I would hope

you would work with this committee-

Mr. WILLIAMS. That is OK I guess-

Mr. Murphy of Pennsylvania. I hope you work with this committee to help make sure we are able to develop new-

Mr. WILLIAMS. Right, yes, and I think this final answer is efficacy on some of these things is a very important issue.

Mr. Rush. The Chair wants to inform the members of the Subcommittee and also the witnesses if I can impose on your time for a second round of questions or one question each per member. I think that this would be important for the deliberation of the Subcommittee. And with that the Chair will extend the opportunity for each member to ask one additional question. Only one question and the Chair will begin with himself for his one additional question.

I am not—I just want to ask, I think I will ask this of both Mr. Dooley and also Mr. Cook. This is a pretty controversial question I am going to ask, but there are some people who have stated that this-the TSCA reform is necessary to fight cancer. Will you respond to that? And do you agree with that and respond and what

do you think about that statement?

Mr. Cook. Mr. Chairman, I think there is no question that protecting public health from exposure to these toxic chemicals is a vital part of what we need to be doing to make sure we are being cost effective and smart about prevention of cancer and other chronic diseases. There is a very strong literature on this subject. We can do it at a modest cost in many cases. We are not talking about giving up modern life. We are talking about moving to safer substitutes. We have done it before. We got lead out of gasoline, got rid of PCB's, everyone said we wouldn't have an electrical grid. Took care of DDT, went off the market, people—some people said we wouldn't have food, so we can do this. If we don't though and if we don't conduct the kinds of studies and collect the kind of information that your legislation would for the first time require, we are going to continue operating in the dark. And I go back to the President's cancer panel. Just this year very strongly saying that including exposures before we entered the world in the womb and going forward we have grossly underestimated the contribution that these chemicals are probably making to cancer in this country, that one half of all men and one third of all women one day will get that diagnosis.

Mr. Rush. Mr. Dooley.

Mr. Dooley. Yes, let me answer it this way is you know our industry absolutely is committed to insuring that every product that is on the shelf is safe and that EPA has the ability to work with the industries, we are providing the appropriate data and information to insure that they can make a determination that that product is in fact safe for its intended use. In reference to the specific issue in terms of cancer is that that is where we go back to where we ought to be embracing a system of prioritizing those chemicals that are greatest concern. And we ought to be focusing the resources and the expertise of both the regulatory sector as well as the private sector on understanding what are those risks and can those risks be managed? And so we would suggest rather than the blanket approach that is embodied in this legislation that would ultimately require every chemical to have a safety determination, is that we ought to identify those chemicals that we know are carcinogenic, that maybe they are an endocrine disruptor, maybe they are a persistent in bio-cumulative toxin. And those are the ones that we say, you know what we need to understand more about these. We need to ask industry to provide us more research and data. We need to EPA spending more time and effort and analyzing whether or not we can manage the risk of those products in Commerce. And if we do that effectively I think we are going to have a more efficient effective system that is going to contribute in reducing some exposures to some products that might be being used now that might in some way be contributing in limited instances to increase in some diseases.

Mr. Rush. The Chair now recognizes our Ranking Member Mr. Whitfield for one question.

Mr. Whitfield. Thank you. Before I ask my question and Mr. Chairman, I ask unanimous consent for inclusion in the record the testimony of Charles M. Auer pursuant to the previous agreement with you all and members maybe they are able to submit questions to him for the record.

Mr. Rush. The Chair is mindful of that agreement and hearing no objections so ordered.

Mr. WHITFIELD. And then I ask unanimous consent that we submit for the record letters and statements regard on this legislation from 12 different groups.

Mr. Rush. Hearing no objections so ordered.

[The information appears at the conclusion of the hearing.]

Mr. WHITFIELD. For my question, first of all thank you all very much for your patience and being with us today. We appreciate it. Mr. Owens, in your testimony you talked about in 1989 the court case in which EPA ruling phasing out the use of asbestos that a federal court overturned that decision by EPA because the rule failed to comply with the TSCA regulation or requirement. I was wanting-I wanted to know specifically what part of the TSCA, the

existing TSCA law was that decision made on?

Mr. OWENS. Thank you, Congressman. Can you hear me? Thank you, Congressman Whit for the question. It was a decision called the corrosion proof fittings decision and the Federal Circuit Court of Appeals looked at basically the two significant obstacles that EPA has to overcome in order to regulate any toxic substances under TSCA in this case specifically asbestos first. There was the requirement in the law that we determined that there defined that there was an unreasonable risk of harm from the substance in this case asbestos. And then once we made that determination to select the least burdensome alternative to regulate that substance. And it is a very length, technical, complicated decision where they went through a whole host of various alternatives that might exist out there and determine that-

Mr. WHITFIELD. But it was based on the unreasonable risk and

least burdensome

Mr. Owens. Both there was a—and the basic conclusion as was said despite nearly unanimous scientific opinion that asbestos creates an enormous range of health problems including cancer that EPA could not meet the burdens under the existing statute to eliminate any uses of asbestos or to significantly regulate those

Mr. WHITFIELD. Thank you.

Mr. Rush. The Chair now recognizes Mr. Sarbanes. Mr. Sarbanes. Thank you, Mr. Chairman. Mr. Dooley, you said I think you said something to the effect of rather than requiring that every product have a safety determination that we focus on those that we know are harmful, potentially carcinogenic and so forth. But I don't really understand that. In other words how are we going to know that something is not harmful or carcinogenic if we don't do a safety determination on it? I understand that there is ones that we know right out of the gate are the worst of the worst and so forth, had that discussion in other hearings and we want to move quickly on those. But if you don't have a process that conducts a safety determination of a chemical how are you going to know that it doesn't fall into fall that other category?

Mr. Dooley. Because, Mr. Sarbanes, I think that it is probably an area which we agree on is that—and I think EPA would acknowledge is that they have the ability by reviewing a data set, by reviewing the chemical characteristic, the molecular weight, the

molecular structure, comparing it to other chemicals of similar composition is that they can make determinations on which chemicals are going to be those of greater concern. There is, obviously now, there is a number of different databases out there where they have identified, you know, carcinogenic chemicals; where they have already identified chemicals that could be an endocrine disruptor. Those lists are currently available today. And so there is, but there is also I think broad recognition that there is a lot of chemicals in Commerce today that pose really very little health risk. And so why should we be, again, requiring EPA to spend as many of their attention and resources on those low concern chemicals versus those that would be of the greatest concern? And the issue on the safety determination, the safety determination is what triggers, you know, the obligation to go out and to consider every aggregate exposure from that chemical. And so do you want to have EPA, which under the legislation in the first 12 months they have to identify 300 chemicals. They would be required within 30 months to go out and with those 300 chemicals that could have-maybe each one had a, you know a hundred applications, or in the marketplace, 30,000 different, you know products that they are in is that they would have to go out and do an aggregate assessment of all of the exposures resulting from those 300 chemicals, and make a determination in whether or not they could meet that standard of a reasonable certainty of no harm, of a having adverse impacts on the public welfare. I mean, you know, I don't—you know when you look at the track record of EPA and their evaluation of chemicals, I mean, I would be astounded if Mr. Owens today could tell you that it would be even remotely possible for them to conduct a safety determination on 300 chemicals in the next 30 months after this legislation was implemented.

Mr. SARBANES. Well, let me ask Mr. Owens. I mean do you think you have got the ability and as I understand it the statute makes clear that there is certain shortcuts that can be taken depending on the kind of chemical that you are looking at. So do you think you have the ability to move forward on this in a deliberate and

timely way?

Mr. OWENS. Well, Congressman, I think the bill also provides for additional resources for EPA to conduct that activity. So I think the short answer would be if we received the additional resources we could make, depending on the level of resources, substantial progress toward achieving a goal like that. But it will depend in part on us getting additional resources from Congress to achieve some of the mission that you would direct us to do.

Mr. Rush. The Chair now recognizes Mr. Murphy.

Mr. Murphy of Pennsylvania. Thank you. I would like to ask perhaps again, you have heard my questions before about some of these substances that have some medical prevention applications. Many chemicals used in medicines can make them more effective, some preventative objects, some antimicrobials, anti-bacterial. Where does this bill, in this current version sit in terms of being able to encourage further research development application and even current use of some of these chemicals and products whose goal is and intended use is to treat disease and prevent infection? Will this help it, hurt it, stop it? What?

Mr. DOOLEY. Well, again with our interpretation and understanding of the legislation is that we think it would hurt it and harm bringing new products into the marketplace. I mean I have another one of my props here that I haven't used yet, but it is a hand sanitizer.

Mr. Murphy of Pennsylvania. That is dangerous stuff.

Mr. DOOLEY. It is. And it would have, you know its problem ingredient is ethanol, ethyl alcohol. It is quite possible that ethanol, would, could be listed as a chemical of concern and at some point would be required to be subject to a safety determination. Again, under what is required under the Act is that legislation of this be as it was implemented, once it was on that safety determination, you would have to go out, again, and to identify every product that had ethanol in it in Commerce today and maybe those that are in naturally occurring. So that would incur your fuel, your biofuels, it would incur your wine and occasional gin and tonic that I drink. It would include, you know, thousands of different applications that then would require EPA to make a determination. Is there a reasonable certainty that this poses no harm? Well, of course it poses some harm to some, you know, in some instances because it is designed to kill things. And that is where we think it is, you know we have to be very careful with this standard. If you don't have a standard that is set appropriately is that it is going to harm a lot of innovations that have a lot of positive contributions that it can make. And again I go back if it is on list of 300, and the EPA hasn't made the determination is that if the language says you cannot bring a new application a new use of that chemical to the marketplace until EPA has completed the safety determination.

Mr. Murphy of Pennsylvania. Thank you.

Mr. Denison. Congressman, could I also answer that question? Mr. Rush. Do you have a comment, Mr. Denison on the last question?

Mr. Denison. Very briefly, yes. I think there is some confusion about the scope here. I mean, first, Cal your wine and beer are fine. There is an exemption right up front for alcoholic beverages. But medical—

Mr. DOOLEY. The exemption that they wouldn't regulate it by toxic—

Mr. Rush. Mr. Dooley, Mr. Denison is recognized. He has the time.

Mr. DENISON. Thank you. Medical applications and drugs and so forth are not intended to be covered either here, so I think there is some confusion. The other thing is I think there is an interpretation of this standard that somehow it is a zero risk standard. That it would drive anything that has any hazard whatsoever off the market. It is not in its application under The Food Quality Protection Act, it is a risk based standard that establishes a level of risk that is going to be acceptable. So I think that is really important to understand here.

Mr. Rush. Mr. Dooley.

Mr. DOOLEY. And Rush, I just want to—when he said I didn't understand the legislation, the exemption for alcohol is to ensure that it exempted from TSCA. It doesn't exempt it from being considered

in the aggregate exposures that would result which was the point that I was making.

Mr. Rush. Mr. Scalise is recognized for one question.

Mr. Scalise. Thank you, Mr. Chairman. I have a question for Mr. Owens and I would like a comment back from Ms. Bosley and Mr. Dooley as well. Chemical distribution companies have a unique role in the supply chain in that they serve as middle men for the manufacturers and industrial customers. A majority of distributors also blend chemicals and mixtures, and distributors that provide blending services could be subject to many of the requirements of this legislation that manufacturers are subject to. It is also feasible they will have to gather use and exposure info for other areas of the supply chain. Are you concerned that this bill could have a dis-

proportionate impact on chemical distributors?

Mr. Owens. Thank you, Congressman. We are still in the process of reviewing all the particulars of the bill, so it is a little difficult for me to say what might happen and what might not happen under some of the individual provisions. But let me respond to it this way, that we have had a lot of conversations about the information that is useful and necessary to gather in order to make all kinds of determinations that might be required to be made under this bill. We have heard a lot of different opinions on that including from downstream manufacturers and some companies involved in the chemical distribution chain that think they need to have this kind of information that would be available under this or some other version of this bill in order to know what is going into the products or the chemicals that they are producing themselves using the ingredients that are available out there. By the same token we think it is important for the manufacturers of these chemicals to know the uses to which their chemicals are being put especially if they are going to be subject to some sort of aggregate cumulative exposure determination that we would make at the agency. So we want to make sure that there is a right balance that is struck here, and the types of information that we need to make the determinations that would be required again under this or whatever version of this bill might come forward gives us that level of information and meets the needs. We want to make sure also that one sector isn't unduly burdened at the expense of another sector. So that would be part of what we would be looking at when we were determining what the minimum data set requirements would be. Under new legislation if there is a requirement like that then there would be different types of minimum data requirements for different types of chemicals. And we would take the specifics of the individual chemical into account.

Mr. Scalise. Thanks, Mr. Dooley, and then Ms. Bosley.

Mr. Dooley. You know I think it would have some impact. This is an area where I think that you know we agree that you know that there has to be a greater degree of transparency than what currently occurs under TSCA. And there has to be a greater sharing of information throughout the valued chain. But I would also like to maybe segue, if this chemical distributor though was importing a product under the existing TSCA or under the legislation is that they would be subject to meeting all the requirements of this bill which would mean if you had a chemical distributor that

just for discussion purposes was trying to import in this Blackberry, or maybe this sanitizer. If it was subject to the safety determination whether it was a chemical distributor, or Target, or Best Buy, they would be required to again to insure that they would have to do the determination of all the aggregate exposures again and also would be the ones that would be responsible for making the—gathering the data to make the determination that this imported product did not pose a reasonable risk of harm. And we think that is a burden that is inappropriate to put on a distributor or a retailer on the importing of a particular article.

Mr. Scalise. Thank you. Ms. Bosley.

Ms. Bosley. I might say that as I said earlier I think yesterday afternoon we got some new language. There was a clerical error regarding mixtures and the way the bill reads now I guess I am more confused than anything, it is—the mixtures were taken out of the title but not the text. And it was taken out of certain sections but not other sections, but mixtures is where chemical distributors will be primarily affected. They do a lot of mixing and if they have to do—if they have to provide a safety determination on every mixture at every concentration it will inordinately affect them.

Mr. Scalise. All right thank you. I yield back.

Mr. Rush. The chair now asks unanimous consent that the following letters concerning the H.R. 5820 be entered into the record. A letter from American Chemical Counsel and others, American Cleaning Institute, Wilson Manufacturing Associates, and Consumers Special New Products Association, the National Association of Manufacturers, the National Association of Chemical Distributors, the Retail Industry Leaders Association, Crop Life America, the Vinyl Institute, Pine Chemicals Association, The People for The Ethical Treatment of Animals, and also a statement for the record from the National Special Chemical and Residents Association. Hearing no objections so ordered.

[The information appears at the conclusion of the hearing.]

Mr. Rush. This concludes—is that including the—all right this concludes this hearing. The Chair really wants to be very intense in his appreciation for all the witnesses. This has been a real provocative and informative discussion. Your testimony has really contributed to the progress of the existing bill, and as we proceed with this bill with other additional hearings, and also with hopefully a mock up sometime in the future. So I want to thank each and every one of you. You have really done this Subcommittee a great service by your participation by your testimony and by the sacrifice of your time. Thank you so very much and the Subcommittee now stands adjourned.

[Whereupon, at 2:40 p.m., the Subcommittee was adjourned.] [Material submitted for inclusion in the record follows:]

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Testimony of

Charles M. Auer President, Charles Auer & Associates, LLC 17116 Campbell Farm Road Poolesville, MD 20837

Submitted on August 3, 2010

To

Subcommittee on Commerce, Trade and Consumer Protection U.S. House of Representatives Committee on Energy and Commerce

On

H.R. 5820 - The Toxic Chemicals Safety Act of 2010

My name is Charles M. Auer. I was formerly an employee of the U.S. Environmental Protection Agency until my retirement in January 2009. While at EPA I gained experience in hazard and risk assessment, policy development and implementation, rule-writing, etc., and also participated as a U.S. negotiator in the development and final agreement on the Stockholm and Rotterdam Conventions. I started at EPA as a staff chemist in and spent my entire EPA career in the Office of Pollution Prevention and Toxics (OPPT) and its predecessors where, starting as a GS-5, I rose through the ranks in a variety of technical, policy, management, and executive positions. In 2002, I was selected as the Director of OPPT and held that position until my retirement. Over my career I developed an in-depth knowledge and an integrated understanding of scientific, technical, policy, and legal issues encountered in implementation of the Toxic Substances Control Act (TSCA). Following my retirement I formed a small consulting company to provide advice and analysis on, among other matters, chemical assessment and management. I also affiliated with Bergeson & Campbell, P.C., a Washington, DC, law firm specializing in TSCA and related areas. Since forming the consulting company I have worked with a variety of clients including chemical companies, trade associations, law firms, and international intergovernmental organizations. While I have had industry clients, I have not done any representational work before EPA or other agency.

I am pleased to have the opportunity to provide testimony on the Toxic Chemicals Safety Act of 2010 (TCSA; H.R. 5820). The testimony I am offering is mine and I am not speaking for or on behalf of anyone else in offering it. I have closely followed the debate about reforming or modernizing TSCA and have published several papers which outline some of my views. I share the concerns voiced by NGOs, grass roots organizations, and others that TSCA has failed to meet its goals and purposes and that a robust new approach is needed. I take heart from industry's statements that it too recognizes that problems exist and that a modernized approach is needed. TCSA is intended to strengthen and deal with the weaknesses in TSCA and, as such, TCSA is based on a discussion draft which was released on April 15, 2010, and subsequently taken through a stakeholder process. However, based on my long experience in this area and my understanding of the scale and complexity of this sector of the economy, I fear that the TCSA approach, if enacted without changes such as those outlined below, runs the risk of failing to deliver on its

goals and expectations despite imposing considerable burden on EPA and the industry or, more optimistically, taking so long to unwind that today's frustrations will continue almost indefinitely. Thus as discussed and explained in my testimony, I believe that further improvement is needed to provide a workable and effective approach to chemical testing, assessment, and management in the U.S. that, when implemented, will meet the needs and expectations of stakeholders and the public.

#### **General Comments**

TCSA proposes a dramatically different approach to managing chemicals from that which currently applies. TSCA for far too long did not did not provide adequate legal authority or receive sufficient oversight and the resources needed to do an adequate job of testing, assessing, and managing the tens of thousands of chemicals in commerce. While I welcome the spirit in TCSA to revise TSCA and address its weaknesses, I do not believe that TCSA as drafted provides a workable and effective approach to meeting the needs to protect public health and the environment from the risks of the tens of thousands of chemicals in commerce. While TSCA with its limited authorities and relatively cumbersome approach was insufficient to meet evolving needs and expectations, I believe that the approaches under TCSA are, in several areas, overly complex and unnecessarily broad and encompassing, and would present significant challenges and issues in their development and implementation, both as a general matter and within the timelines allotted, and prove inefficient in their application. In summary, although I agree with many of the goals of the bill, based on my experience, I fear that it would fail to adequately meet its stated goals and purposes.

Recognizing that the US must compete in a global economy, I have concerns that the approach in TCSA will overly and unnecessarily burden U.S. competitiveness in this critical sector and likely have important and undesired impacts on both the chemical manufacturing sector and the manufacturing sectors that rely on its products, and on innovation, both generally and particularly with regard to new chemical introductions. I believe it is essential that an approach be developed that can ensure timely and effective development of the hazard and exposure information needed to adequately inform and prioritize decisions regarding chemicals, enable needed actions to protect human health and the environment, and thereby gain greater confidence in the chemical industry and its products, and do so in a way that enhances the capacity for U.S. competitiveness and keeps innovation and market incentives within the U.S. economy. TCSA in my view does not provide that approach as currently drafted.

TCSA does include a number of useful and valuable concepts that, if appropriately structured and applied, could do much to meet the needs and expectations of the public regarding the safety of chemicals and products in commerce. I believe the central failing under TSCA was the inability to develop the hazard and exposure data needed to inform decisions on existing chemicals – TCSA would resolve this issue although I question if the approach provided is workable. TSCA did not provide adequate focus to several areas which TCSA has picked up including, in no particular order: addressing the needs of vulnerable subpopulations; encouraging the introduction of safer and greener new chemicals and providing help to industry's efforts, throughout the value chain, to move toward safer and greener chemicals; providing authorities whereby EPA could actually control existing chemicals; shifting the burden of proof from EPA to industry; providing a means which could obtain the resources needed for governance by EPA (including applying fees to claims for Confidential Business Information); giving recognition to the general societal interest in reducing and avoiding animal testing via encouragement of new approaches that can provide data adequate for the purposes of assessment; establishing a public data base containing test data, assessments, and decisions and their bases, and others. While the inclusion of

such concepts within TCSA is welcomed, the workability and effectiveness of the approaches proposed varies.

#### Specific comments

I am intimately familiar with the statutory provisions and requirements under TSCA and their application and operation. Based on that understanding and experience, I offer the following selected observations concerning possible issues and concerns associated with the approaches as proposed in TCSA. I also offer for consideration by the Subcommittee and stakeholders, several suggestions for possible improvement.

Mixtures. I found TCSA to be confusing and complex in its treatment of mixtures.

The clarification provided by the July 28 technical correction to the legislation was welcomed in the way that it narrowed the scope of the requirements and resolved a number of fundamental questions about the treatment of and approach to mixtures as new chemicals. At the same time, and while I appreciated the deletion of the blunt and encompassing approach to mixtures found in the discussion draft, I question if the TCSA approach to mixtures is workable and effective. I found the concept of the mixtures survey at section 3(b)(3) a useful step but was at a loss to understand and attempt to apply the determination whether mixtures "have or may have substance characteristics that are different, in kind or degree." While I agree that dealing with mixtures is important, it is a difficult and complex area which will require more discussion and might best be dealt with via general requirements that would be implemented by EPA by rule once it has conducted and analyzed the results of the mixture survey and better understands the issue. Certainly EPA, and as is the case under TSCA, should have general authority under TCSA to deal with specific mixtures where needs or issues emerge in the interim.

Section 4. Minimum Data Set and Testing of Chemical Substances and Mixtures. I found TCSA's approach to testing to be over-heavy and impractical, with the potential to impose unintended consequences on the introduction of new chemicals and to present potentially significant but currently unknown magnitudes of burden on the regulated industry given the number of existing chemicals in commerce and the scale of the testing that might be needed to satisfy TCSA's requirements. I believe that getting the provisions under section 4 right is the key to a workable and effective approach for dealing with chemicals.

TCSA would require a minimum data set (MDS) for all chemical substances except those exempted per section 4(a)(3). EPA is given one year to develop and issue a rule implementing the MDS requirements as specified at section 4(a)(1)(A) and with the volume and timing triggers at section 4(a)(2)(A). I am supportive of the general concept of an MDS to be applied generally to existing chemicals although I oppose the requirement that new chemicals be subject to this requirement at the time of notification for the reasons given in my discussion of TCSA section 5 below. I also question if the exemptions allowed are sufficient to avoid unneeded or questionable testing, also as discussed elsewhere in my testimony.

I recommend for consideration by the drafters the discussion and analysis on "test data reporting" in my recent article (Auer, 2010) which explores issues of testing strategies and costs, production triggers and tiered testing menus, and other matters relevant to this section of TCSA. As noted previously, I view TSCA's central failing to be its inability to develop needed data and understanding and thus I attach great importance to the getting the approach right under any revised section 4.

While the testing that EPA would require to meet TCSA's MDS requirements can only be surmised, there are several models that can serve to outline, for purposes of discussion, possible approaches to designing the MDS that might be required. Given the TCSA requirement that the data set be "useful in conducting safety standard determinations" and the inclusion of the term "toxicological properties" with its broad statutory definition (section 3(24)) in the required elements of the MDS, I consider it unlikely that the Screening Information Data Set (SIDS) would suffice to satisfy these requirements (notwithstanding this statement, I note that the concept of "varied or tiered testing" in TCSA section 4(a)(1)(A) is useful and provides some flexibility in possibly using the SIDS menu although some clarity regarding how the concept relates to the other requirements for the MDS in section 4(a) and to section 4(b) concerning testing beyond the MDS would be helpful to understand). The SIDS data set, which was developed by the Organization for Economic Cooperation and Development (OECD) and used by EPA in its "High Production Volume (HPV) Challenge" program and in HPV test rules, is intended to provide the basis for a screening level assessment that can initially assess a chemical and help to inform decisions as to needed higher tier testing. An MDS which both satisfies the definition of "toxicological properties" and meets the needs of a "reasonable certainty of no harm" assessment seemingly would require testing meeting or approaching a confirmatory data set for each chemical, such as that required for pesticide registrations under Part 158 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), Tier 3 in EPA's Voluntary Children's Chemical Evaluation Program (VCCEP; note that this menu is limited to health effect testing endpoints and as such does not deal with environmental fate and environmental effects testing endpoints), or the "high volume" tier under the EU's REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) regulation (a table comparing several of these testing menus is available in Auer, 2010). If testing such as that found in these confirmatory menus is needed to satisfy the requirements for the MDS, it seems unlikely that TCSA's allowed time periods for developing the data sets will be sufficient. Furthermore, the costs required for such testing would be considerable. If, for example, EPA would determine that the SIDS is adequate for one or more of the volume tiers (although as noted above it is debatable whether the SIDS menus suffices to meet the requirements imposed), the estimated cost is approximately \$200,000 for that battery, whereas the estimated cost of the high volume tier under REACH is 900,000 to 1.6 million Euros (see Auer, 2010); I do not have cost figures for the other test menus cited but estimates should be obtainable from EPA. To provide greater workability and flexibility, I suggest narrowing or softening the definition of "toxicological properties" per se or as applied under section 4(a) and an additional suggestion for consideration is noted in my discussion concerning TCSA section 6.

A basic question that would be very useful to have an answer to is "how many Inventory chemicals are actually in commerce and thus potentially subject to such an MDS requirement?" I am not aware of any vetted estimate of this number but applying available information, I guesstimate that about 50,000 chemicals could be in commerce. Considering that tens of thousands of existing chemicals are potentially at play, with MDS test menu costs potentially ranging between \$200,000 and more that \$1 million per chemical (and even considering the potential reductions in testing afforded by the various exemptions at TCSA section 4(a)(3), the animal welfare considerations at section 34, and the potential for testing done under the EU's REACH regulation to meet some of the needs), the costs of such testing are likely to be prohibitive. I encourage the Subcommittee to carefully reconsider the approach proposed in TCSA and my 2010 paper provides some specific suggestions that might help to inform the debate.

I note the inclusion at TCSA section 4(b)(3) of several considerations, including relative costs and the availability of facilities and personnel to perform the testing, that are to be applied by EPA in obtaining testing in addition to that in the MDS. I suggest, given the number of chemicals potentially at play and the potential scope of the needed testing, that these considerations should also be applied by EPA in the MDS rulemaking required under section 4(a)(1).

A final comment on this section concerns TCSA section 4(b)(3)(B) where EPA "may specify test protocols and methodology." While I am generally in favor of flexibility and discretion where appropriate, the provision as worded would not adequately ensure the enforceability of testing requirements imposed by EPA. To ensure the development of quality test data, I believe it is essential that industry conduct any newly required testing via enforceable test methods. From a somewhat different perspective, I know from experience that in some cases testing is needed in areas that do not have standard methods available and suggest inclusion of an approach based on the TSCA Enforceable Consent Agreement process for meeting such needs.

Section 5. Manufacturing and Processing Notices. I found TCSA's approach to new chemicals to run the risk, in essence, of "throwing the baby out with the bath water." I question the need for and merits of an upfront MDS on all new chemicals. I believe it will have a detrimental effect on the rate and extent of introduction of new chemicals which, based on my experience at EPA, are generally safer and greener and over time provide important continuous improvement benefits to heath and the environment and to U.S. competitiveness and innovation. I believe there are better ways to approach meeting the needs presented in this section of TCSA and several concepts are discussed for consideration.

TCSA would require a premanufacture notification from manufacturers and processors which includes a minimum data set on all new chemicals. I believe that this approach presents a strong bias against new chemicals and will dramatically reduce the introduction into U.S. commerce of new chemicals thereby having significant adverse impacts on innovation. Further I believe it has *not* been shown that the current approach to new chemicals under TSCA has failed to prevent unacceptable risks to public health and the environment. I encourage careful analysis of this situation to ensure that significant unintended adverse consequences are avoided in developing the regulatory approach to new chemicals under TCSA.

I offer these comments from the perspective of a former EPA staff scientist and official who participated personally in the review of thousands of new chemicals and was otherwise involved in the oversight of OPPT's efforts over several decades to assess and take needed actions on tens of thousands of new chemicals notified to EPA. I believe based on that experience that new chemicals are generally safer and greener than their existing chemical competitors and, over time, than their new chemical predecessors. EPA has made several efforts to "check its work" over the years and has consistently failed to turn up evidence of significant problems despite concerns voiced about the lack of a minimum data set on new chemicals and EPA's consequent reliance on (Quantitative) Structure/Activity Relationships ((Q)SAR) analysis in its review of new chemicals. New chemicals additionally often provide greater energy efficiency, product efficiency, or provide approaches that can help deal with existing health or environmental issues. Most of the time the improvements seen with an individual new chemical are incremental (however, there are exceptions to this rule of thumb), but over time a strong continuous improvement effect is not infrequently realized. An example, one of many, is what are called "100% solids" polymer coatings which have been developed and introduced as new chemicals since the 1980s and provided, over years of introduction as new chemicals, a breakthrough in solvent-free coating technology which combined heath benefits (from reduced solvent exposure and release, and which also

contributed to VOC (volatile organic compound) reductions) and greater energy efficiency (the coatings did not require evaporation of the solvent and curing could be obtained via radiation with, for example, electron beam technologies rather than heating or other energy-intensive processes). In my view, EPA has been appropriately cautious in its review of new chemicals, taking testing and control decisions on about 8% of new chemicals while an additional 5% were withdrawn by the notifier often in the fact of EPA action, such that significant risks were avoided while allowing the U.S. to benefit from the continuous innovation provided by new chemicals.

I raise concerns about a requirement for an MDS on all new chemicals at the time of notification because such up-front costs will have a dramatic and negative impact on the introduction of new chemicals. I encourage the Subcommittee to closely examine this issue and obtain the information needed to inform its understanding. Other countries which have required a minimum data set for new chemicals at the time of notification, such as the Minimum Premarket Dataset (MPD) in Europe, have seen dramatically fewer numbers of new chemicals introduced: over a 20-plus year period from the early 1980s until the entry into force of REACH in 2007, the European Union with its standing MPD requirement saw the introduction of approximately 4,000 new chemicals, while the U.S. over the same period saw the introduction into commerce of approximately 18,000 new chemicals corresponding to those notified in the EU (i.e., the U.S. figures have been adjusted to reflect the scope applied in the EU). As stark as these figures are, the impact would be even greater if, as discussed above under section 4, a more extensive and expensive data set is required. I specifically encourage that efforts be made to understand the experience in the EU regarding new chemical notifications since volume-based testing requirements were imposed on new chemicals following the entry into force of the REACH regulation in 2007. I suspect, but have not been able to confirm, that the testing requirements under REACH have further reduced the number of new chemicals introduced in Europe.

Despite my confidence in the historic performance of the U.S. new chemicals program, I do believe that the approach should be strengthened, particularly with regard to approaches that could enhance data submission requirements for new chemicals in a way that ensures the capacity for the U.S. to keep innovation and market incentives within the U.S. economy. One way to meet these goals is discussed in a recent publication (Auer et al., 2009) which proposes to make the new chemical data requirements generally consistent with those on existing chemicals but recognizing the impact of up-front submission, allows for some delay in testing:

- new chemical notifications would be required to contain production, exposure, and use
  information plus any available hazard and environmental fate information on the chemical and
  EPA would have the ability to require early development of needed testing when it identifies
  concerns and to impose control measures as appropriate;
- the notifier would be required to undertake and complete the same data set that would be required
  for existing chemicals when the new chemical reaches certain production volumes, based on the
  time period allowed for submission of test data on existing chemicals.

Thus, for example, using the timeline proposed in TCSA, high volume new chemicals might be required to produce the data set within 3 years after introduction of the new chemical. Alternatively, consideration should be given to whether a somewhat longer time period or staggered data development approaches might make sense for new chemicals which, as such, have yet to actually establish a commercial market. I believe that an approach which does not as a general matter require up-front testing but provides for

flexibility in the timing of test data development will do much to continue to encourage the continued development and introduction of new chemicals in the U.S.

Section 6. Prioritization, Safety Standard Determination, and Risk Management. I found TCSA's approach to regulation and management of chemicals to be over-heavy and ill-conceived. While I appreciate the desire to apply a safety-based approach to all chemicals and their uses, I question from several perspectives the merits of a "one size fits all" regulatory standard for all chemicals in all their uses when the pesticides law that is the source for the proposed standard only selectively applies such a standard to food use pesticides and otherwise applies a risk-based standard for other pesticide registrations. I also question the practical value of the critical use exemption procedure proposed in the bill. I believe that improvements to these and other parts of this section of TCSA are needed for the reasons explained and offer some suggestions in these regards.

The concept in TCSA of creating a priority list to guide EPA's efforts is a strong addition which helps deal with the lack of guidance and direction to EPA under TSCA. I am cautious, however, about the concept of statutorily populated lists of chemicals (such as that at section 6(a)(1)(A)) and, if this approach is retained, encourage careful consideration of the entries to ensure they are appropriate for such a list.

TCSA's safety standard at section 6(b)(1), with its applicability to *all* intended uses, its *taking into account* of aggregate exposures, and the need to *ensure a reasonable certainty that no harm will result*, would in my view present considerable issues and challenges if applied against all TSCA chemicals and uses. I appreciate the significance of the changes made from the version in the discussion draft but believe that further refinement is needed to achieve a workable and effective regulatory standard and approach.

I question the practicality and need for applying a "reasonable certainty of no harm" standard to *all* intended uses. This standard derives from a similar standard developed for pesticides under the Food Quality Protection Act but applied *only* to the setting of food tolerances for pesticide residues. Other pesticide uses and exposures are subject to an "unreasonable risk" standard for pesticide registrations under FIFRA. Recognizing that

- pesticides are designed to be biologically active, all uses are specifically registered and subject to requirements per the relevant registration, and that the use of pesticides involves intentional exposure and/or release,
- while in comparison, chemicals are not designed to be biologically active, relatively few involve intentional exposure or release, and they have a broad diversity of uses encompassing industrial, commercial, and consumer applications,

it is difficult to square the public policy implications and see the practicability of the TCSA approach which proposes to apply a "reasonable certainty of no harm" standard to the myriad of all chemical uses, with the approach in FQPA, which applies a similar standard to only the narrow and targeted subset of food use pesticides. Put another way, from a public policy perspective I find it hard to understand why *all* uses of chemicals, especially given their characteristics as outlined above, should be subjected to a more stringent regulatory standard than that which is applied to non-food use pesticides. Recognizing these points, TCSA should at most be structured to apply such a standard to a narrow subset of uses which, following the FQPA approach, represent the greatest potential for exposure or concern, and to apply an appropriate risk-based standard to other uses.

One approach for consideration under TCSA is to possibly target an appropriate safety standard to use in products intended for consumers and children and to apply an appropriate risk-based standard to commercial and industrial uses. I base this suggestion on the recognition that there is at best limited ability to otherwise control exposures to chemicals at the point of contact with consumers and children and, furthermore, the available legal authorities are limited (while TSCA provides general authority, the effect of the Federal Hazardous Substances Act on chemical issues in consumer products is largely limited to acute effects while the recently enacted Consumer Product Safety Improvement Act covers only a limited subset of chemicals when used in children's products). This is not the case with exposures and releases associated with commercial and industrial uses of chemicals where other statutory schemes (Occupational Safety and Health Act, Clean Air Act, Clean Water Act, etc.) provide broad authority in conjunction with that available under TSCA, and where the application of concepts such as product stewardship and industrial hygiene provide an additional measure of assurance. For these reasons, and to provide an approach which can meet the test of being workable and effective, I encourage the Subcommittee to consider targeting an appropriate safety standard approach to an appropriate subset of uses while looking to an appropriate risk-based approach for other uses.

I note in passing that applying such a scheme would also have the benefit of focusing MDS testing: testing sufficient to meet a safety standard need would be required on only that subset of chemicals having uses relevant to the safety standard, while chemicals not having such uses would be subjected to an MDS that satisfies the needs for a risk-based determination; such as approach would save considerable MDS testing resources and animals.

I appreciate the inclusion of the concept of the "industrial hygiene hierarchy of controls" at TCSA section 6(2)(F) but suggest that some clarity or a definition is needed, given that a variety of such hierarchies can be found. More fundamentally, however, I raise a question whether it is good public policy to give EPA explicit authority to "prescribe specific control measures to reduce occupational exposures" without an explicit reference to TCSA section 9 or a requirement that the action be taken in consultation/concurrence with the Occupational Safety and Health Administration (OSHA), given the potential that independent EPA action could introduce conflicts with occupational exposure standards and related requirements established by OSHA under its authority.

Section 6(e) of TCSA provides a procedure for critical use exemptions to be requested and approved if EPA determines that the manufacturer or processor has demonstrated by clear and convincing evidence that a combination of requirements has been met. I believe that the exemption, while a good concept, will, without revision, find little practical applicability given the difficulty that will be encountered in satisfying the nested requirements articulated. Notwithstanding this concern, I suggest that consideration be given to providing the flexibility to also implement such exemptions by rule in the event that the exemption involves multiple manufacturers and processors.

Finally, I raise a question whether, in TCSA section 6(f) on PCBs, the references to section 37 on data quality are intended, or if one or both should reference section 36 on international cooperation?

Section 8. Reporting and Retention of Information. I found the concept of periodic declarations to be a useful one that will do much to ensure that EPA's understanding remains current with commercial developments. At the same time, however, I suggest ways that might reduce the information collection burdens without adversely affecting effectiveness and also suggest retaining TSCA section 8(b)(2)

concerning "Inventory categories" which had been deleted under TCSA, and suggest further development of the "categorized Inventory" concept at TCSA section 8(c)(3).

In considering the significant reporting burden of a declaration requirement being applied to all manufacturers and processors and noting the additional requirement for immediate updating when any one of numerous circumstances is encountered, I raise the question whether the requirement for updating every 3 years is more frequent, and thus more burdensome, than necessary. I also note that there would be value in requiring EPA to propose and publish a reporting rule specifying reporting requirements for declarations to avoid *ad hoc* submissions based solely on the statutory text at section 8(a)(2).

Concerning TCSA section 8(c) on the Inventory, I raise a question about the impact of not including or otherwise dealing with TSCA section 8(b)(2) which serves as the basis for the listing within the TSCA Inventory of numerous section 8(b)(2) categories (also known as "statutory mixtures") which comprise thousands or possibly tens of thousands of complex materials such as ceramics, frits, glasses, cements, and others. I note that the retained TSCA section 26(c) provides general authority to take actions with respect to categories of chemical substances and arguably could be applied by EPA as appropriate in this situation. Nonetheless, given the large number of materials at play which, depending on how or whether EPA chooses to address the issue without a specific statutory provision, could potentially result in thousands (or possibly tens of thousands) of additional Inventory entries leading potentially to tens of thousands of declarations from manufacturers and processors (and not forgetting the MDS requirement), I believe there would be great value in providing clarity in the statute by retaining section 8(b)(2).

I note the requirement at TCSA section 8(c)(3) that EPA within 5 years, and every 3 years thereafter, categorize the substances on the Inventory. The only action specified is that EPA publishes the results of its categorization efforts. I encourage that consideration be given to how such a categorized Inventory might be of value in developing prioritized approaches to assessing or setting aside chemicals from further review. I do not have an elaborated proposal to offer but note that the approach might be broadened and strengthened to operate as a key, if not the central feature in prioritization efforts under the act. For example, section 8(c)(3) could be set up to operate in a manner similar to that applied in Canada under the Canadian Environmental Protection Act for the "categorization" of chemicals to identify those that require further review and those which do not present such a need. Such as approach could thus serve to support continued development of the section 6 priority list and also provide an organized framework for efforts to identify persistent, bioaccumulative, and toxic (PBT) chemicals under TCSA section 32, and "safer alternative" and "intrinsic property" candidates for consideration under sections 35 and 39, respectively, among other provisions under TCSA.

Section 14. Disclosure of Data. While I agree that, historically, industry has approached confidential business information (CBI) claims as a "blanket" need rather than as specific needs warranting protection against disclosure, I do not believe that the approach as drafted, while it represents an improvement over that in the discussion draft, provides an appropriate balance in addressing the competing interests. Without revision, I believe the approach's treatment of chemical identity runs the risk of adversely impacting innovation particularly as it relates to new chemicals. More generally, I have some concern that the approach proposed could have an effect of weakening the confidence that the business community will have in the ability of EPA to legally protect legitimate business confidential information from disclosure.

I do not believe that the section affords adequate protection to intellectual property in the form of chemical identity, especially with regard to new chemicals where I believe such protection is needed to encourage and protect the investment made in research and innovation. While it is my guess that the "chemical identity" approach proposed would have a lesser effect generally on existing chemicals, I suspect that there nonetheless would be specific instances where the approach if implemented without greater balance and flexibility could have negative competitiveness impacts on companies doing business in the U.S. While I appreciate the difficulty in attempting to assess a health and safety study without chemical identity information, I do not believe it is sound public policy to see this transparency need as one that reflexively trumps the need for protection, for example, of new chemical identity at the time of notification and for some appropriate period thereafter.

I also have some concerns that the general approach, including the "rules of construction" with its "shall" requirements at section 14(b), the explicit statements of "Information not eligible for protection" at section 14(d), and other provisions, could have an effect of weakening the confidence that businesses have in the ability of EPA to legally protect legitimate claims of confidentiality under TCSA and encourage careful consideration of this possible issue.

Section 32. Persistent, Bioaccumulative, and Toxic Substances. I appreciate and support the need for greater attention and authority to be applied to "PBTs" given the obvious issues that can be presented by exposure to and release of chemicals combining these properties. However, at the same time, I encourage careful consideration of the potential unintended consequences of the approach proposed.

One particular area of concern is the requirement that new chemical PBTs will be evaluated subject to the critical uses exemption at section 6(e). As discussed above, I believe that, as a general matter, section 6(e) as drafted will rarely be satisfied and a likely consequence of retaining this requirement is that no—or at most very few—PBT new chemicals will successfully enter commerce. An experience I had several decades ago when EPA was developing its PBT policy for new chemicals may help to illustrate the potential for unintended consequences from such an approach.

A new chemical was reviewed and determined to clearly meet the draft PBT policy based on EPA's review and it was teed up for a ban action. However, upon closer inspection the chemical was found to be manufactured in, as I recall, gram or milligram quantities for use as a liquid crystal dye in digital displays for watches. Based on the information in the new chemical notification, it was clear that well-controlled but tiny releases would occur during production of the chemical and during use by downstream digital display producers.

The case caused me to take another look at the draft policy and to recommend adjusting the approach to consider the nature and magnitude of the exposures and releases to ensure that such reflexive unintended consequences could be avoided. To be clear, this is not to say that this situation alone needs to be addressed, rather the point is the importance of recognizing the diversity of the chemical products and uses which are in commerce and the future uses which the Subcommittee can't anticipate. Accordingly, I encourage development of a more flexible approach that gives EPA more discretion than that provided by the language in section 32(a) in identifying PBTs and by the requirement to apply section 6(e) to new chemical PBTs in determining the need for and nature of the actions required. Black-and-white requirements can be useful if carefully applied but I believe that section 32 presents a situation that requires and would benefit from the application by EPA of both judgment and discretion to make decisions that are protective but avoid unintended - and undesired - consequences.

Section 34. Reduction of Animal-based Testing. I appreciate and generally support the concepts outlined in this section and offer a few suggestions and cautions.

I suggest that it may be useful to articulate an appropriately worded longer-term goal for EPA to work towards in this area; as suggested in Auer *et al.* (2009) such a goal might be framed to achieve by 2020 the testing vision set forth by the National Research Council of the National Academy of Sciences in its 2007 report "Toxicity Testing in the 21st Century: A Vision and a Strategy."

As noted above in the discussion under section 4, I have raised concerns about the possible lack of enforceability concerning testing conducted under TCSA. Regarding section 34(b) and the need to periodically publish a list of methods, I raise a question about the need to carefully consider the effect of the failure to include and apply a definition of "standards for the development of test data," a term that was defined in TSCA at section 3(12) and applied under section 4. The discussion of methods in section 34 is focused on "demonstrated testing methods that reduce the use of animals in testing" and, while this is a worthy goal, the loss of the concept of "test standards" and the relatively general nature of the discussion in section 34(b) may lead to a weakening in the level of scientific rigor that is required to be met by the test methods applied under TCSA. An important point to consider is that whatever approach is selected in this regard must also allow the U.S. to continue to meet the terms of the OECD's Council Decision on Mutual Acceptance of Data which ensures international acceptability of testing conducted in accord with OECD test guidelines and Good Laboratory Practices. I question whether the approach in TCSA provides adequate assurances in the areas discussed in this paragraph.

Section 35. Safer Alternatives and Green Chemistry and Engineering. I generally support the concepts outlined in this section and believe that TCSA and its future orientation is improved by virtue of their inclusion. At the same time, some suggested improvements are offered.

A general comment is to note that the section, with its emphasis on the concept of "safer alternatives," might be strengthened and improved via a somewhat broadened and elaborated concept that also allowed recognition of factors like energy efficiency, product efficiency, and others that can also be valuable contributors to developing safer and greener alternatives. Based on my experience at EPA in development and implementation of the Design for the Environment (DfE), Green Chemistry, Green Engineering, Pollution Prevention, "Sustainable Futures," and "New Chemical Pollution Prevention Recognition" efforts, I believe that such a broadened approach can be invaluable in developing and applying analyses that reflect an *integrated optimization* of the properties, relative hazards and exposures, performance needs and attributes (including "functional use" considerations such as those applied in the DfE program), costs, and other factors that are key to developing alternatives that will provide commercial value and find application.

I note the requirement under TCSA section 35(a)(2)(B) which has the Administrator determining that the proposed alternative "is effective for the proposed use or uses." I question if this is something that EPA can do or if such a "determination" is actually better left for the markets to decide. I believe that such consideration might better be applied as a "factor" rather than a determination by EPA.

Section 39. Exemption for Chemical Substances or Mixtures Based on Intrinsic Properties. While I liked the concept of an exemption based on intrinsic properties, I found the exemption approach contained in this section to be overly cautious such that, at the end of the day, it would not serve its purposes of exempting chemicals for which there is little need or value in applying the close scrutiny that otherwise would be required by TCSA. I recommend that a more flexible approach be developed that could meet

the purposes of exempting chemicals from some or all requirements as warranted and offer a few suggestions in this regard. I also raise what I believe is an important issue concerning polymers and whether it makes sense to treat them in the same manner as nonpolymeric chemicals under TCSA.

TCSA proposes authority to exempt certain chemical substances and mixtures based on intrinsic properties. If EPA can determine that "scientific consensus exists that the intrinsic properties of a chemical substance or mixture are such that it does not and would not pose any risk of injury to health or the environment under any current, proposed, or anticipated levels of production, patterns or use, or exposures arising at any stage across the lifecycle" (emphasis added), EPA may by order exempt the substance or mixture from one or more requirements under sections 4, 5, 6, or 8 of the act. While the concept of the exemption is a welcome addition, it is difficult to see that it will be useful for many chemicals. As indicated by the italicized points in the determination text, the multiple requirements, all of which must be met, conspire to make it virtually impossible for a chemical to be determined to satisfy the requirements. Consider the example of water -- could it satisfy the requirement for "not posing any risk...under any...anticipated... exposures...at any stage across the lifecycle" when this substance, while essential for life, can cause intoxication or drowning under exposures that are known to occur? Even high molecular weight polymers, that are eligible for production under the current TSCA section 5(h)(4) polymer exemption, could be found ineligible for the section 39 exemption insofar as the reactive or toxic monomers used in their manufacture might not satisfy the "across the lifecyle" requirement. Finally, the fact that all such chemicals would not be eligible for CBI protection seems to detract further from the appeal of the exemption.

I encourage that careful consideration be given to developing an approach that would prove workable and effective in exempting chemicals for which data development or other requirements might not be warranted. Although I appreciate the desire for what amounts to an almost "absolute and comprehensive" standard based on intrinsic properties for making such determinations, I believe that such an approach runs a considerable risk of defeating the purposes of the exemption. I believe that to serve and meet its purposes the exemption must allow an appropriate role for judgment and discretion in applying the exemption. Thus, for starters, I encourage the Subcommittee to gain a good understanding of EPA's approach in implementing the TSCA section 5(h)(4) exemptions. I believe these exemption approaches have been effective in encouraging the introduction of new chemicals under appropriate conditions of volume and use (such as the low volume exemption and the low release/low exposure exemption) or where polymers meet conditions of high molecular weight and other factors. I encourage the Subcommittee to consider ways that such approaches, in addition to a revision of the "intrinsic properties" approach, might be incorporated into revised legislation.

Relatedly, I draw attention to the issue of polymers and whether and to what extent the revised law should treat the tens of thousands of polymers which are likely in commerce (the TSCA Inventory lists approximately 30,000 polymers) in the same manner for MDS and declaration purposes as the nonpolymeric chemicals on the Inventory. While some polymers are of concern many, perhaps most, are generally considered to present low hazard, especially those that have high molecular weights such that absorption is limited. Polymers also present practical difficulties. For TSCA Inventory purposes, polymers are named based on the monomers which are used in their production. Thus, an Inventory polymer can be named as "Polymer of A, B, C, and D" where A to D are monomers used in producing the polymer and the chemical name does not otherwise provide any details on the reaction sequence or conditions, the ratio of the monomers, the molecular weight, or other information critical in determining

the nature of the resultant polymer. In fact it is possible to make multiple, distinctly different polymers from a given Inventory listing by adjusting factors such as these. (In reviewing new chemical polymers, EPA principally considers the polymer that the submitter intends to produce, an approach which gives a specific focus to EPA's assessment task.)

Because of such considerations and practical complexities, polymers were not subject to the reporting that EPA required by regulation under the Inventory Update Reporting rule and polymers were also not included in EPA's HPV Challenge program. In Europe, the approach to polymers has differed historically from that in the U.S., in that polymers were generally not subject to the legal regime which preceded REACH (e.g., polymers were not included on the European inventory nor were they generally subject to new chemical notification requirements). Under REACH, polymers are generally exempted from the registration requirements that otherwise apply to chemicals. The Subcommittee should consider these points carefully given the large number of Inventory-listed polymers which could be subject to testing and declaration requirements, and also recognizing some of the practical issues briefly noted in this section. One alternative approach to consider is to continue to apply requirements under section 5 to new chemical polymers, to generally exempt new and existing chemical polymers from the MDS requirements, and to obtain exposure and use information under section 8 needed to support an EPA review of the issue similar to the approach envisioned under TCSA section 3(b)(3) for mixtures. Based on that analysis, EPA could, as suggested above for mixtures, develop general requirements for testing and assessment of polymers that would be implemented by EPA by rule once it better understands the issue. During the interim, EPA should have authority to require appropriate testing and impose controls on specific polymers or classes of polymers when there is a need for such action.

Regulatory procedures and need for adequate due process. I welcome and support the broadened order authority provided to EPA under TCSA, however, recognizing the nature of and the limitations in orders, I encourage careful consideration of whether the authority is workable and effective in all of the areas where it is mentioned.

In particular, I question the approach of developing and applying CBI guidance via order authority at section 14(e) and the requirement at section 24(d) that all actions on single chemical substances or a single category of substances "shall be made through an order." Regarding the first, it is difficult to understand how order authority, both generally and particularly without a requirement for proposal and comment, would be used to implement CBI "guidance." The second appears difficult to implement effectively. Consider the chemicals on the section 6(a) initial priority list where, from my perspective, it would prove very difficult to implement needed requirements on formaldehyde, methylene chloride, the phthalates category, and others via order authority considering the number of manufacturers, processors, users, distributors, disposers, etc. that are involved with such chemicals. Furthermore, since most actions under section 6(c) will likely involve single chemicals or a single category (are the PBTs under section 32 a "single category of chemical substances?"), it appears that order authority would be the required approach in almost all instances. I encourage that greater flexibility to use rulemaking be provided.

I also question whether TCSA as drafted provides the appropriate balance between an ability to take more prompt action by order versus the due process afforded by rulemaking. Although I am not a big fan of rulemaking, given the time required and the difficulty encountered in proposing and promulgating an action, I have to say that in my experience at EPA virtually every rule and guidance document was improved following EPA's consideration of the comments. I grudgingly came to the conclusion that notice and comment is a necessary and valuable step which serves to improve the rulemaking process and

ultimately make Executive branch regulations workable in a participatory democracy. I think this is an important issue to get right and I encourage the drafters to think carefully about the appropriate role for rules versus orders in the bill.

<u>Timelines and Deadlines</u>. I believe based on my experience that a number of the timelines and deadlines in TCSA will prove very difficult to realize, while others might not be sufficiently responsive. While I appreciate the desire by the Subcommittee and stakeholders for prompt progress to be realized after the failings under TSCA, the reality is that sorting through the issues and developing workable and effective approaches that satisfy statutory requirements is, in an area as complex as this, difficult to do and the result will not be improved by unrealistically short deadlines which not infrequently have been superimposed on each other. I offer a few suggestions for consideration.

One of the practical challenges that EPA will encounter in implementing any revision to TCSA is the need to staff up (despite the challenges and delays encountered in the Federal hiring process) and to develop and implement support contracts (which itself can be a time-consuming and complex process) that would allow it to apply such resources in meeting the requirements under a revised law. Even as EPA is attempting to expand its staffing and extramural capabilities, it will at the same time need to work to understand, interpret, and apply the new statutory requirements, develop options and get Agency decisions and potentially inter-Agency clearance on required actions, establish the bodies called for under the law, develop policies required per the statute or ones that EPA determines are needed to guide its future efforts, and so on. The first several years will be quite challenging to say the least. I note, for example, the following overlapping timelines/deadlines and other considerations that might benefit from more realistic timeframes and other changes in approach:

- Whether the 1 year allowed under TCSA section 4(a) provides sufficient time for EPA to propose
  and promulgate the MDS requirements given the issues and complexities at play and as discussed
  above in the relevant section. Relatedly, I note also the requirement at section 35(a)(2) that
  within 1 year EPA establish by rule the "safer alternatives data set" and, within the same period,
  establish a program to create incentives for the development of safer alternatives (section
  35(a)(1)).
- Whether TCSA should continue to require "premanufacture" notices from new chemicals or, based on EPA's experience under TSCA with new chemicals, if the trigger should be shifted to "premarketing" (i.e., notifications would be required after manufacture but before commercialization has occurred). The key statistic prompting this suggestion is that only about 50% of the new chemical premanufacture notifications received by EPA actually commence manufacture (Auer, 2009), which represents considerable wasted effort by both EPA and the industry.
- Section 5(b)(2) under TCSA essentially requires that all new chemicals be taken through the section 6(b) safety standard determination, unless otherwise exempted. Per section 5(b)(5) EPA has 90 days to determine whether a safety standard determination is required and 9 months later EPA is required to have completed such required determination (although there is no consequence or relief provided if EPA is late), which means that EPA could take as much as a year to render the determination on each new chemical. In comparison, under TSCA EPA has 90 days (extendable to 180 total days) to take its decision on new chemicals and historically decisions have been completed on the great majority of new chemicals within the initial 90-day

period (in the case of exemption requests under TSCA section 5(h)(4), decisions to grant or deny such requests are typically made within 30 days of receiving the exemption notification). I question if a new chemicals decision process that could require 1 year for a decision to be rendered, appropriately balances the competing needs between sound decision-making and being adequately responsive to commercial needs and realities. I encourage careful consideration of shortening the timeline, noting in particular that, in my experience at EPA, it is generally simpler to assess the situation associated with a single notifier of a new chemical, than it is to assess and understand a situation involving an existing chemical with multiple commercial entities at play.

- TCSA section 6(a)(1)(B) requires that EPA, within 1 year of enactment, update the priority list to
  a total of not fewer than 300 chemicals. While I can appreciate the value of having such a list
  developed promptly, I question if the deadline makes good sense considering, among other
  aspects, that EPA would not have the first set of declarations available when it is making these
  initial additions to the priority list
- Other TCSA requirements that come due within 18 months following enactment, include, for example: section 8(d)(1) on establishing a public database; section 14(e) on guidance for CBI claims; section 32 on establishing criteria for PBTs; section 37 on "data quality;" section 38 on "hot spots;" section 39(d) on "prior regulatory exemptions;" and so on.

I think you for the opportunity to have provided this written testimony.

#### References

Auer, Charles M., Blake A. Biles, and Lawrence E. Culleen, "Fundamental changes could be in store for regulation for commercial chemicals," BNA Chem. Reg. Reporter (Vol. 33, No. 40), Oct 12, 2009 (pp 1008-1012).

Auer, Charles M., "Periodic Reporting of hazard data, exposure information on existing chemicals," BNA Chem. Reg. Reporter (Vol. 34, No. 16), April 19, 2010 (pp. 384-392).

Assuming that half of each of the 34,500 polymers and the 53,900 lower volume chemicals are currently in production, and adding in the 6,200 higher volume chemicals which are known to be in production based on the 2006 reporting under the IUR rule, yields an estimated total of slightly over 50,000 substances currently in commerce and for which EPA would possibly receive MDSs under TCSA section 4(a)(2) and declarations under TCSA section 8(a)(1) (the math is as follows: (53,900 + 34,500)/2 + 6,200 = 50,400).

The 2006 Inventory Update Reporting rule received reports on a total of approximately 6,200 non-polymeric chemicals produced above 25,000 pounds per year at a site (<a href="http://www.epa.gov/iur/pubs/2006\_data\_summary.pdf">http://www.epa.gov/iur/pubs/2006\_data\_summary.pdf</a>, page 2). It is not known how many of the polymers on the TSCA Inventory are currently in production, nor is it known how many of the lower volume non-polymeric Inventory chemicals are presently in commerce (such chemicals were not subject to the 2006 IUR rule). It is known that there are approximately 30,000 polymers listed on the TSCA Inventory and EPA reports additionally over 4,500 TSCA section 5(h)(4) "polymer exemptions" for a total of 34,500 polymers potentially in commerce (an additional unknown number of exempted polymers is also likely to be in commerce based on the terms of the revised TSCA section 5(h)(4) polymer exemption). There are 45,000 non-polymeric Inventory chemicals that did not meet the volume reporting trigger under the 2006 IUR rule plus an additional approximately 8,900 TSCA section 5(h)(4) "low volume exemptions" that have been approved by EPA (<a href="http://www.epa.gov/oppt/pubs/oppt101-032008.pdf">http://www.epa.gov/oppt/pubs/oppt101-032008.pdf</a>, see pages 6 and 12) yielding an estimated total of 53,900 lower volume nonpolymeric chemicals potentially in commerce.

<sup>6</sup>Historically, the U.S. and the EU have taken somewhat different approaches to the chemicals that are covered under their respective new chemical notification requirements and the figures reported have accounted for those differences. A key difference is that new polymers are treated as new chemicals in the U.S. (where they represent about 55% of the new chemicals notified to EPA) whereas polymers are generally not subject to notification in the EU. The U.S. also has a regulatory exemption procedure for low volume new chemicals under TSCA section 5(h)(4). Thus, considering these points, the U.S., through approximately 2006, has seen over 9,200 nonpolymeric new chemicals added to the Inventory and over 8,800 low volume exemption requests granted by EPA for a total of approximately 18,000 nonpolymeric new chemicals introduced into U.S. commerce (http://www.epa.gov/oppt/pubs/oppt101-032008.pdf, see pages 7-12).



### WRITTEN STATEMENT OF THE

# NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION (NPRA)

### AS SUBMITTED TO THE

## SUBCOMMITTEE ON COMMERCE, TRADE AND CONSUMER PROTECTION

Committee on Energy and Commerce United States House of Representatives

on

H.R. 5820, the "Toxic Chemicals Safety Act of 2010"

July 29, 2010

NPRA, the National Petrochemical and Refiners Association, appreciates the opportunity to submit this statement on H.R. 5820, the "Toxic Chemicals Safety Act of 2010". NPRA's members include more than 450 companies, including virtually all U.S. refiners and petrochemical manufacturers. Our members supply consumers with a wide variety of products and services that are used daily in homes and businesses. These include products that fuel our cars, heat our homes, pave our streets, and the chemicals that serve as "building blocks" for making everything from plastics, clothing and medicine to computers and bullet-proof vests.

NPRA appreciates the commitment Chairman Waxman and Chairman Rush have demonstrated through the stakeholder process of reforming the Toxic Substance Control Act (TSCA) and are pleased to have participated in the discussions. While we recognize the need for TSCA modernization, NPRA believes significant problems remain with the legislation that will have a disproportionate impact on small businesses, lead to increased barriers of entry into the marketplace, decreased domestic innovation, and threaten American international competitiveness.

A primary concern with H.R. 5820 is the establishment of a potentially unachievable safety standard. In the legislation, manufacturers would be required to prove that their products meet a "reasonable certainty of no-harm" standard for all intended uses of each chemical covered under this legislation. While a "no-harm" standard is questionably suitable for pesticides that are designed to kill pests and are applied to things that may be ingested, it is not appropriate to regulate industrial chemicals. Most of these chemicals never come into contact with society and are used in closed systems to make a large number of essential products such as solar panels, vehicles, and batteries. Forcing the Environmental Protection Agency (EPA) to find a reasonable certainty of no harm for all intended uses of each chemical is impractical, nearly

impossible, and will be extremely burdensome on the Agency and those trying to meet the standard. Experience from the regulation of pesticides has demonstrated that EPA is reluctant to deem anything "safe" without ever-increasing amounts of very costly and animal-intensive laboratory data.

The proposed legislation also provides little protection for American intellectual property, and the protections that are allowed in the legislation would require companies to pay "user fees" to obtain them. Requiring both the EPA and companies to make detailed information about their formulas publicly available, even down to the molecular level, is simply opening the door to foreign knockoffs. Companies would have little incentive to introduce any new or safer chemicals into U.S. commerce, knowing that their intellectual property would be disclosed. Under the legislation, the disclosure rules for Confidential Business Information (CBI) would follow the procedures and processes of the Freedom of Information Act (FOIA). FOIA does not stipulate which types of information are considered confidential in the manner that the current TSCA provisions set for CBI. Since chemical identity could no longer be claimed as CBI under this bill, there would be a disproportionate adverse impact on small businesses and innovation would be dampened for all companies. Furthermore, the strong CBI protections in the current TSCA statute have been an important factor in companies' decisions to use the United States as an economic platform for innovation. By making this information publicly available, proprietary information that is exclusive property of American businesses will be freely available to overseas competitors from China or India who could easily discover the exact formulations and chemical compounds of American products through government databases. They would then be able to produce these same products, most likely at a lower price, and export them to the United States, placing domestic companies as a competitive disadvantage.

We understand and agree with the belief that there needs to be a balance between the public access to information regarding substances with which they may come in contact and providing adequate protection to confidential business information. Regulators must be able to adequately assess the risk of substances without inhibiting the ability of America's businesses to develop chemicals that make our lives safer and enhance our quality of life. Unfortunately, we do not believe this current legislation as drafted achieves such a goal.

Another concern with H.R. 5820 is the seemingly unilateral authority it gives the EPA to create and enforce regulations without an effective system of checks and balances. For example, the decision on chemical prioritization is left exclusively up to the EPA with no guidelines and no explanation required as to why particular chemicals are chosen. Also, there are very few requirements imposed on the EPA before it can mandate expensive and animal-intensive testing or actions potentially disruptive to the supply chain. Historically, the EPA has required millions of dollars in costly testing in order to approve a chemical under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) before approving a chemical. This is simply a cost that small- and medium-sized chemical companies cannot afford in an already suffering domestic economy, especially for the approval of a chemical that never comes into contact with the population. Furthermore, most opportunities for judicial review have been eliminated. There is no recourse for companies that question or want to review the EPA's actions and decisions.

The regulations that the legislation would create for the approval of new chemicals will stifle innovation and allow foreign manufacturers a distinct advantage over domestic manufacturers. The upfront testing costs, disclosure of intellectual property and change in the status of various exemptions could bring America's strong history of manufacturing innovation to a halt. For example, the European Union dramatically increased the regulatory requirements

for new chemicals before they were allowed into commerce, resulting in the introduction of only 4,000 chemicals since that time. In the same period, about 18,000 new and typically safer chemicals were introduced into U.S. commerce.

Lastly, NPRA cautions against allowing states to adopt additional or more stringent regulations than those included in the federal program. Chemical companies operate throughout many different regions and states. Allowing a patchwork of possibly dozens of different chemical control programs creates significant regulatory confusion, places an undue burden on chemical companies and will certainly be disruptive to interstate commerce.

NPRA believes that any chemical control program should take a tiered, targeted and risk-based approach to chemicals management, which is the most efficient and effective way to ensure safety for industrial chemicals on a national scale. However, the proposed legislation uses a one-size-fits-all approach to information collection and safety, and places an undue burden on both the EPA and companies to submit, collect, and manage an overabundance of information, with no regard to what information is useful, needed, or even legitimate. An efficient and effective program would regulate chemicals using a risk-based standard, meaning the greater the likelihood of societal exposure to chemicals, the greater priority they are in terms of testing, information collection and, for those that also have significant risks, potential risk management actions.

The "Toxic Chemicals Safety Act of 2010" significantly raises the cost and barriers of entry into the marketplace and as a result will greatly stifle domestic innovation while giving foreign competitors the advantage of easily being able to ship their products in from overseas. It also places an undue burden on market entrants to collect, manage and submit an overabundance

<sup>&</sup>lt;sup>1</sup> Response of Charlie Auer, former Director of the Office of Pollution Prevention and Toxics, U.S. EPA, to a blog posting of the Environmental Defense Fund; May 12, 2010; <a href="http://blogs.edf.org/nanotechnology/2010/05/09/raising-the-bar-for-chemical-safety-will-spur-not-stifle-innovation/">http://blogs.edf.org/nanotechnology/2010/05/09/raising-the-bar-for-chemical-safety-will-spur-not-stifle-innovation/</a>

of test data and exposure information with little regard to what information is useful, needed or legitimate for risk management purposes. Furthermore, raising the barriers of entry into commerce would have a negative impact on green chemistry, innovation and the development of new and safer chemicals.

NPRA and its member companies support the reasonable modernization of TSCA.

Unfortunately, the proposed legislation would decrease domestic innovation and hamper

American global competitiveness. NPRA stands ready and willing to work with the committee towards the responsible modernization of our nation's chemical safety laws.







July 29, 2010

The Honorable Bobby Rush Chairman Subcommittee on Commerce Trade, and Consumer Protection United States House of Representatives Washington, DC 20515 The Honorable Ed Whitfield Ranking Member Subcommittee on Commerce Trade, and Consumer Protection United States House of Representatives Washington, DC 20515

Dear Chairman Rush and Ranking Member Whitfield:

The member companies of the American Cleaning Institute (ACI), Consumer Specialty Products Association (CSPA), and the Grocery Manufacturers Association (GMA) are pleased that the House Subcommittee on Consumer Trade, Commerce and Protection has scheduled today's hearing on H.R. 5820, the "Toxic Chemicals Safety Act of 2010." We all agree that it is time to modernize the Toxic Substances Control Act (TSCA) of 1976 given the more than three decades of scientific and technological advancements since it was first enacted. A modernized TSCA will help improve confidence in the safety of chemicals used in the United States. We ask, respectfully, that you include this letter in the official record for the Congressional hearing on H.R. 5820.

ACI, CSPA and GMA, are the leading trade associations representing the downstream users of chemical substances. We are committed to manufacturing and marketing safe, innovative and sustainable products that provide essential benefits to consumers while protecting human health and the environment. Product safety is the foundation of consumer trust and our industry expends substantial resources toward achieving this goal.

As participants in the stakeholder process initiated by this Committee, we have worked to communicate what we support in the modernization of a U.S. chemical management policy. Toward that end, ACI, CSPA and GMA provided Members of the Subcommittee with the following building block concepts in our joint comments on the Discussion Draft that should be included in any framework to modernize TSCA:

- Adopting a risk-based approach to prioritize and review chemicals in commerce that will include adequate
  use and exposure data;
- Promoting innovation and competitiveness under an improved U.S. chemical policy rather than a
  patchwork quilt of state laws;
- Establishing clear and achievable deadlines and ensuring that EPA has adequate resources to meet those deadlines;
- Clarifying EPA authority to manage and mitigate risk concerns;
- Practical approaches to data development and information sharing that leverage the chemical management programs of other nations and minimize animal testing.

We urge the Subcommittee to continue to work with our industry to modernize TSCA in a way that will improve consumer confidence in chemicals in consumer products while also strengthening U.S. competitiveness in the global economy. Briefly, we would like to highlight some provisions in H.R. 5820 that were raised in our joint comments on the discussion draft which would impact our industry.

We remain unclear and concerned about the direction H.R. 5820 takes with regard to mixtures and
particularly on new uses; we are ready to work with you to obtain and accomplish further clarification
on the provisions.

- While we appreciate the changes under the proposed safety standard that focus the safety determination on intended use, the proposed standard continues to require EPA to determine "a reasonable certainty of no harm" that would be unattainable. We will continue to analyze the bill to determine what impact it will have on the current consumer product protection regulatory system and the overall risk-based system of U.S. chemicals management.
- We maintain our support for up-front substantiation for confidential business information (CBI) that allows U.S. industry to maintain a competitive edge in a very challenging global economy. However, consistent with our discussion draft comments, EPA should require resubstantiation of CBI claims that would be prompted by appropriate EPA determined "triggers" for CBI claims rather than an arbitrary five-year expiration timeline. The need to protect such information from disclosure to competitors is directly related to the commercial value companies derive from the investments they have made in their products; a five-year timeline bears no reasonable relationship to the time and expense necessary to realize a return on those investments. Also, we question the appropriateness under TSCA of including new requirements for a company to disclose chemical identity and other commercial information to other companies along the supply chain.

H.R. 5820 has taken some steps to address these concerns raised in the stakeholder process; however, a great deal of work needs to be done to ensure a robust chemical management system for U.S. companies. While we could not support provisions as currently drafted, we remain committed to working with you and your colleagues on the substantive work ahead. We are committed to this process and will continue to work with all stakeholders to develop strong and world-class chemical management system under a modernized TSCA.

#### About ACI

The ACI is the Home of the U.S. Cleaning Products Industry™, representing producers of household, industrial, and institutional cleaning products, their ingredients and finished packaging; oleochemical producers; and chemical distributors to the cleaning product industry. ACI represents the \$30 billion U.S. cleaning products market. For more information, please visit the ACI website at <a href="https://www.cleaninginstitute.org">www.cleaninginstitute.org</a>.

#### About CSPA

The Consumer Specialty Products Association (CSPA) is the premier trade association representing the interests of approximately 240 companies engaged in the manufacture, formulation, distribution and sale of approximately \$80 billion annually in the U.S. of hundreds of familiar consumer products that help household, institutional and industrial customers create cleaner and healthier environments. Our products include disinfectants that kill germs in homes, hospitals and restaurants; candles, fragrances and air fresheners that eliminate odors; pest management products for home, garden and pets; cleaning products and polishes for use throughout the home and institutions; products used to protect and improve the performance and appearance of automobiles; aerosol products and a host of other products used everyday. Through its product stewardship program Product Care®, and scientific and business-to-business endeavors, CSPA provides its members a platform to effectively address issues regarding the health, safety, sustainability and environmental impacts of their products. For more information, please visit wwww.cspa.org.

## About GMA

The Grocery Manufacturers Association (GMA) represents the world's leading food, beverage and consumer products companies. The Association promotes sound public policy, champions initiatives that increase productivity and growth and helps ensure the safety and security of consumer packaged goods through scientific excellence. The GMA board of directors is comprised of chief executive officers from the Association's member companies. The \$2.1 trillion food, beverage and consumer packaged goods industry employs 14 million workers, and contributes over \$1 trillion in added value to the nation's economy. For more information, visit the GMA Web site at <a href="https://www.gmaonline.org">www.gmaonline.org</a>.

July 28, 2010

The Honorable Bobby Rush United States House of Representatives 2416 Rayburn House Office Building Washington, DC 20515 The Honorable Ed Whitfield United States House of Representatives 2411 Rayburn House Office Building Washington, DC 20515

## Dear Chairman and Ranking Member:

The organizations listed below, which represent companies throughout the business of chemistry and metals value chain, including producers, processors, wholesalers, retailers, end-line manufacturers, and users, remain committed to modernizing the Toxic Substances Control Act of 1976 (TSCA). We believe that a strong legislative framework is critical to creating a successful chemicals management regulatory program and requires deliberate and careful consideration due to the complexities of the issues and their broad impact on all parts of the American economy.

Some of the organizations below participated in the stakeholder discussions for the Toxic Chemicals Safety Act of 2010 (H.R. 5820), the bill introduced by Chairman Rush last Thursday, and we appreciate that opportunity. Unfortunately, H.R. 5820 does not adequately account for the complexities of chemical and metals uses in commerce. We are concerned that the bill as drafted is not workable and would significantly and negatively impact American jobs and innovation.

- The safety standard established in H.R. 5820 is not achievable. It requires an unworkable risk assessment methodology for every chemical substance and for all EPA-prioritized mixtures. Chemicals used in industrial articles, such as solar panel cells and integrated circuits, would face significant regulatory barriers. The "no-harm" standard essentially requires proof of zero-risk, an impossible goal that will hamper lower-risk, beneficial products from coming to market. Further, the standard's requirement for companies to assess aggregate exposures from all uses of a chemical—and not just their own uses—is also unachievable because companies won't have information about these other uses and their exposure scenarios.
- The proposed regulatory structure in H.R. 5820 will create a new barrier to American innovation and job growth. New chemicals and new uses of existing chemicals will be subject to a year-long review by EPA, creating a distinct competitive advantage for foreign manufacturers and a disincentive to produce new chemistry solutions, including safer and greener alternatives, in the United States. American innovation and job growth will be damaged by this complex and burdensome process.
- H.R. 5820 places substantial burdens on importers of chemicals, mixtures, and articles.
  Importers will be subject to all the declaration, data generation, assessment, and reporting provisions of TSCA, just as if they are chemical manufacturers or processors.
  Additionally, this provision appears to be vulnerable to challenge under the World Trade Organization agreements.

The Honorable Bobby Rush, The Honorable Ed Whitfield July 28, 2010 Page 2

These are but a few of our collective concerns with H.R. 5820. We believe that the bill requires substantial changes to ensure a robust statutory and regulatory program that will garner public confidence in the safety of chemicals used in the United States, while protecting and promoting American innovation and jobs. We look forward to working with you as the Subcommittee addresses these important issues.

## Sincerely,

Alliance of Automobile Manufacturers American Chemistry Council American Cleaning Institute American Coatings Association American Composites Manufacturers Association American Forest & Paper Association American Petroleum Institute Automotive Aftermarket Industry Association **Ball Clay Producers Association** Consumer Specialty Products Association Flexible Packaging Association Fragrance Materials Association Grocery Manufacturers Association Industrial Minerals Association - North America International Diatomite Producers Association National Association of Chemical Distributors National Association of Manufacturers National Electrical Manufacturers Association National Industrial Sand Association National Mining Association National Oilseed Processors Association National Petrochemical and Refiners Association National Retail Federation Natural Gas Supply Association North American Metals Council Personal Care Products Council Pine Chemicals Association Silicones Environmental, Health and Safety Council of North America Society of Chemical Manufacturers and Affiliates Specialty Graphic Imaging Association SPI: The Plastics Industry Trade Association The Adhesive and Sealant Council Treated Wood Council

cc: Chairman Waxman, Ranking Member Barton, House Energy & Commerce Committee
Energy & Commerce Committee, Subcommittee on Commerce, Trade, and Consumer
Protection Members



July 28, 2010

House Energy and Commerce Committee Subcommittee on Commerce, Trade and Consumer Protection 2125 Rayburn House Office Building Washington, DC 20515

Dear Chairman Rush and Ranking Member Whitfield:

As the Energy and Commerce Subcommittee on Commerce, Trade and Consumer Protection prepares for the upcoming hearing on H.R. 5820, the Toxic Chemicals Act Safety of 2010, CropLife America provides this letter to share our concerns regarding the bill as currently drafted. CropLife America represents over 60 companies who are developers, manufacturers, formulators and distributors of crop protection technologies. The technologies and products provided by our members are essential tools for the American farmer.

Most significantly, we are troubled by a provision in the bill that amends the existing pesticide exclusion from review under the Toxic Substance Control Act (TSCA). We believe that EPA's review of pesticides under the Federal Insecticide Rodenticide and Fungicide Act (FIFRA) is protective of human health and the environment, and that the current exclusion for pesticides under TSCA properly respects that authority.

Further, FIFRA has at least as stringent if not a stronger safety standard and data requirements than is proposed under the House bill. We are very concerned that H.R. 5820 could be used to undermine FIFRA authority by requiring a duplicate review for pesticides under TSCA if the chemical is also used for other purposes. Given FIFRA's strict regulatory review, this provision seems redundant and burdensome.

In addition, many of the inert ingredients used in our crop protection formulations are currently regulated under section 5 of the TSCA, as well as being subject to regulation under FIFRA and Federal Food, Drug and Cosmetic Act (FFDCA). Because of this interest, we share some of general concerns about other portions of the bill as those raised by the broader chemical industry – e.g., standard of review, minimum data set, prioritization, protection of proprietary information, etc.

Based on these issues, CropLife America has very serious misgivings with H.R. 5820 in its current form. We look forward to further dialogue on the Committee's efforts to revise TSCA and welcome your questions regarding our concerns with the bill.

Beau Feerman

Sincerely,

Beau Greenwood Executive Vice President Government Relations & Public Affairs

\* Representing the Plant Science Industry • 1156 15" St. N.W. • Washington, D.C. 20005 • 202.896 7585 • 202.463.0474 fax • www.croplifeamerica.org



CC:

Representative Henry Waxman, Chairman, Committee on Energy & Commerce Representative Joe Barton, Ranking Member, Committee on Energy & Commerce Committee on Energy & Commerce



Vice President Energy and Resources Policy

July 28, 2010

The Honorable Bobby Rush United States House of Representatives Subcommittee on Commerce, Trade, and Consumer Protection 2416 Rayburn House Office Building Washington, DC 20515

The Honorable Ed Whitfield Ranking Member United States House of Representatives Subcommittee on Commerce, Trade, and Consumer Protection 2411 Rayburn House Office Building Washington, DC 20515

Dear Chairman and Ranking Member:

The National Association of Manufacturers (Manufacturers) supports a U.S. chemical regulatory and management system that is risk-based and uses the best science to ensure that chemicals are safe for their intended uses. Our 11,000 members - representing both chemical manufacturers and downstream users - remain committed to modernizing the Toxic Substances Control Act of 1976 (TSCA). Manufacturers believe that a strong legislative framework is critical to creating a successful chemicals management regulatory program and requires deliberate and careful consideration due to the complexities of the issues and their broad impact on all parts of the American economy. Unfortunately, the Toxic Chemicals Safety Act of 2010 (H.R. 5820), introduced by Chairman Rush last Thursday, does not adequately recognize these complexities. We are concerned that the bill as drafted would significantly and negatively impact American iobs and innovation.

- The safety standard established in H.R. 5820 is not achievable. It requires an unworkable risk assessment methodology for every chemical substance and for all EPAprioritized mixtures. Chemicals used in industrial articles, such as solar panel cells and integrated circuits, would face significant regulatory barriers. The "no-harm" standard essentially requires proof of zero-risk, an impossible goal that will hamper lower-risk, beneficial products from coming to market.
- The legislation is overly broad in scope. H.R. 5820 is overly broad and creates an unworkable bureaucratic framework. It gives the EPA unprecedented control over products by extending its current authority to mixtures and articles and by intruding into the established responsibilities of numerous other federal agencies.
- The proposed regulatory structure in H.R. 5820 will create a new barrier to American innovation and job growth. New chemicals and new uses of existing chemicals will be subject to a year-long review by EPA, creating a distinct competitive advantage for foreign manufacturers and a disincentive to produce new chemistry solutions, including safer and greener alternatives, in the United States. American innovation and job growth will be damaged.

- H.R. 5820 provides insufficient protection for Confidential Business Information ("CBI").
  To compete in today's global economy, Manufacturers need to protect information regarding their products. While this legislation provides renewable CBI protection, it often takes companies more than the five-year timeframe to develop their products. Furthermore, Manufacturers believe that the CBI protection should be criteria driven. To ensure this disclosure of information does not discourage manufacturers from making product investments, data confidentiality provisions need to protect proprietary information to encourage innovation and protect businesses from loss to competitors globally
- H.R. 5820 would create conflicting federal and state chemical regulatory programs. Lack
  of confidence in the EPA's ability to implement TSCA has led states to create individual
  chemical management regimes. The legislation would require chemical manufacturers,
  processors and business users to comply with both federal and state regulations, unless
  compliance with federal laws is made "impossible" because of conflicting state
  requirements. Manufacturers believe this approach encourages the development of
  inconsistent statutory requirements and would cause a complex patchwork of federal
  and state regulatory programs.

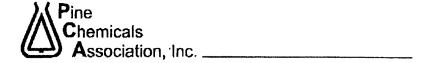
These are but a few of our collective concerns with H.R. 5820. Manufacturers believe that H.R. 5820 requires substantial changes to ensure a workable legislative and regulatory program that will gamer public confidence in the safety of products, while protecting and promoting American innovation and jobs.

Sincerely.

Keith McCoy, Vice President

Energy and Resources Policy

Cc: Chairman Waxman, Ranking Member Barton, House Energy & Commerce Committee Energy & Commerce Committee, Subcommittee on Commerce, Trade, and Consumer Protection Members



July 26, 2010

The Honorable Henry Waxman Chairman, Committee on Energy and Commerce 2204 Rayburn House Office Building Washington, DC 20515

Dear Mr. Waxman:

The Pine Chemicals Association (PCA) is an international trade association comprised of 46 producers of natural chemical products derived from pine trees that end up in products as diverse as inks, peints, adhesives, lubricants, diesel fuel, fragrances and even cholesterol-reducing agents for human consumption. Our members were part of the "green" products industry many decades before the term was ever used. The value of our products in the United States alone exceeds one billion dollars and the industry provides employment for about six thousand workers. Our association has had a long—history of positive interactions with the United States Environmental Protection Agency on a several regulatory issues - especially those concerned with the Toxic Substances Control Act (TSCA).

The PCA is also one trade association of fifty-three in the Chemicals Interests Group, an organization representing a large part of the US economy that would be affected by the passage of H 5280 bill. We support a rational and reasonable bill to update TSCA, but while there are a few modifications we can agree with, the bill being proposed by the Honorable Mr. Rush and you are not that bill.

The modifications to TSCA that you envisage represent a huge expansion in expensive government command-and-control regulation with little benefit to the public. We have so many concerns that we cannot see how it can possibly be amended to form a law that can be implemented. Among the major ones are:

- The regulation of mixtures would be a large and costly increase in complexity. It
  is highly unlikely that a mixture would be more hazardous than its components,
  so this seems to be little more than an exercise in data gathering.
- The Confidential Business Information protection is so porous that foreign industry will have no difficulty in deciphering our products and their end-uses enabling their low-cost production to compete more effectively and driving American jobs offshore.
- The inclusion for the first time of downstream processors in the TSCA regulations will be a difficult and, for many, an unfamiliar major new requirement at precisely the time when our economy is struggling to return to profitability.
- New chemicals and new uses will require increased testing and reporting. This will discourage domestic research and development, hindering the inventiveness

that has made our industry a world leader and increasing costs. We have already seen the chilling effect of excessive regulation on the development of new chemical products in Europe. Excessive controls on new uses for a substance already tested and found to be safe serve no useful purpose.

- There are so many increased reporting requirements that our member companies will surely have to increase hiring or diversion of personnel into the regulatory function. This will make our industry less compatitive than that overseas which doesn't have to shoulder a similar burden.
- The bill tends to shift the emphasis on regulation of hazards rather than risks, A hazardous chemical presents no risk if there is no exposure.
- Substances have well-developed and understood definitions. The bill allows the EPA Administrator, to declare that an existing chemical is whatever he chooses to call it.
- 8. Lack of pre-emption is of particular concern. It is critical to our member companies that they can sell nationally without having to meet more restrictive state regulations that may have been promulgated to meet local political pressure rather than based on good science.
- Emphasizing "hot spots" is a misdirected and unnecessary effort. Communities that end up on the "list" will surely suffer from the bad publicity.
- 10. To meet the provisions of this bill in the time frame specified will surely require a significant increase in USEPA staff. Since user fees will not be retained within the agency increased appropriations will be required, leading to increased government spending at a time when we can ill afford it.

Finally I might add that since this Administration has repeatedly stated its support for "green" products and industries it seems inconsistent to needlessly burden the members of the PCA with yet more unwieldy and expensive regulations.

We are ready to help in any way if you choose to start over.

Sincerely,

Pine Chemicals Association, Inc.

Walter L Jones / President & COO

Co: To all (58) Committee Members of the House Committee on Energy and Commerce



1700 NORTH MOORE STREET SUITE 2250 ARLINGTON, VA 22208 T (703) 841-2300 F (703) 841-184 WWW.RILA.ORG

July 29, 2010

The Honorable Bobby Rush United States House of Representatives 2416 Rayburn House Office Building Washington, DC 20515 The Honorable Ed Whitfield United States House of Representatives 2411 Rayburn House Office Building Washington, DC 20515

Dear Chairman Rush and Ranking Member Whitfield,

The Retail Industry Leaders Association (RILA) welcomes the opportunity to submit written comments on H.R. 5820, the "Toxic Chemicals Safety Act of 2010." RILA members place the highest priority on the safety and quality of the products they sell to their customers, and we support a strong federal system for chemical management. We welcome Congressional efforts to modernize the 1976 Toxic Substances Control Act, and H.R. 5820 is a step forward in the process. Nevertheless, RILA has serious concerns with several aspects of the bill, in particular the unworkable burdens related to articles and mixtures, new authority to order recalls without a court action, and the impossible preemption standard.

By way of background, RILA promotes consumer choice and economic freedom through public policy and industry operational excellence. Our members include the largest and fastest growing companies in the retail industry which together provide millions of jobs and operate more than 100,000 stores, manufacturing facilities and distribution centers domestically and abroad.

#### H.R. 5820 Would Impose Untenable Burdens on Importers

Retailers are often the importer of record of final consumer products for the simple reason that retailers have the most efficient and innovative global supply chains. Regardless of whether a retailer is the importer of record, they do not produce the imported product and are not in a position to know all the chemical substances and mixtures used to make the products they sell. That is why under TSCA today, retailers (even retailers as importers or private labelers) do not have chemical inventory/chemical content reporting obligations unless they are importing a chemical substance or mixture.

Section 13(a) of H.R. 5820 would dramatically change this model by imposing specific new requirements on importers. In doing so, the bill essentially treats importers as chemical manufacturers. Specifically, section 13 says:

The importer of any chemical substance, mixture, or article containing a chemical substance or mixture for distribution in commerce shall satisfy all requirements under sections 4, 5, 6, and 8 of this Act, without regard to whether the chemical substance or mixture has been formed into or contained in an article prior to importation.

In other words, the bill requires importers of or finished goods to satisfy all requirements of the Act for testing/minimum data set, notification, new chemicals and uses, control, safety standard determinations, and reporting and certification for chemicals and mixtures in those finished goods, even though exposure to those chemicals may be zero or virtually zero.

Retailers sell hundreds of thousands of final products to consumers, and their expertise is in distribution and retail sales, not manufacturing of products or chemicals that may be included in those products.

## Importers of Record Are Not Manufacturers

Notwithstanding their expertise in global supply chains, retailers do not possess the expertise or have access to product information to conduct and perform the requirements in section 13—those are specific functions and responsibilities of product manufacturers. Retailers are not in a position to control what is in products, except to require their suppliers to know and comply with relevant standards for their products. Moreover, retailers are not in a position to report or undertake other risk management requirements related to chemical make-up for all the products they sell.

RILA also notes that many of the same reasons why retailers cannot meet the bill's requirements for chemicals in imported articles also applies to the bill's requirements for imported mixtures. Retailers import many consumer products that do not meet the TSCA definition of "article" but which do meet the definition of "mixture." Examples include dishwasher detergent, paints, lubricants, liquid soap, shoe polish, or saline solution.

RILA believes responsibility for compliance should be based on the amount of control each supply chain partner has over the product as it moves through the supply chain. For example, if retailers have new obligations in a modernized TSCA, they should be limited to reporting only certain levels of chemical content in products and providing information to consumers.

## Articles Should Not Generally Be Subject to TSCA Requirements

Consumer products sold by retailers move through complex supply chains with several stakeholders—material manufacturers, formulators, fabricators, packagers, and distributors. Moreover, these finished products often consist of hundreds of components, each of which has its own supply chain. The difficulty of tracking the chemical substances or mixtures in a single consumer product increases exponentially depending on the complexity of the product and the level of quality management processes in the supply chain for a product category.

As an example, a single piece of upholstered furniture may have hundreds of components within the finished product. Each component may be sourced in full or partly fabricated from hundreds of global suppliers. A partial list of components in a piece of upholstered furniture includes: the wood or metal frame; composite wood backing: springs; filling material whether hair, fiber, flock, foam, foam rubber, down; coverings such as woven or knot fabrics, plastics, leather, synthetics; hardware and fastener accessories such as nails, screws, fasteners, glue, brads, brackets, braces, snaps, buttons, thread and hem tape, rivets, bolts, washers, nuts; functional and or decorative components such as leg glides, cups or pads, leg extensions, wheels, casters;

decorative hardware; surface finishings, such as printing, paint, varnish, dying, and yarns made into tassels and other trimmings.

Another example is brassieres. There are more than 30 components that go into a single bra, and the bra industry is based on offering multiple choices and the level of complexity increases with the variety of materials employed in an assortment. Bra components are sourced globally, either partially or fully assembled by the bra manufacturer, and include: non-stretch padded straps or elastic fabric straps; elastic gore that connects cups in the center; fabric covered inner sling under cups (instead of under wire), graduated padding and may also contain removable padding; plastic tip under wire; wings (stretch or non stretch fabric extending from outside bra cups to back closure); coated hook and eye closure; moisture wick components; a combination of dyed, printed natural and synthetic woven, knit, decorative textiles; elastic materials, dyed sewing thread, embroidery, and decorative trims.

These two disparate examples begin to show the breadth, complexity and impracticability of the new requirements for importers and subjecting finished articles to TSCA requirements.

## TSCA Today Largely Exempts Imported Articles-For Good Reason

Under TSCA today, the Environmental Protection Agency (EPA) and U.S. Customs and Border Protection (CBP) can require importers of articles to meet testing, notification, control, and reporting requirements. Nevertheless, time and time again, the EPA has chosen to exempt importers of articles from those requirements. For example:

- CBP exempts chemicals in imported articles from TSCA import notification requirements (unless an EPA rule expressly requires reporting of a chemical imported in articles), 19 C.F.R. § 19.121(b).
- EPA exempts new chemicals in imported articles from Pre-Manufacture Notice requirements, 40 C.F.R. § 720.22(b)(1).
- EPA exempts chemicals in imported articles from Inventory Update Rule requirements, 40 C.F.R. § 710.50(b).
- EPA exempts chemicals in imported articles from significant new use rule requirements (unless it expressly requires notification of a chemical imported in articles), 40 C.F.R. § 721.45(g).

The EPA adopted these exemptions because it recognized the burden and potential impossibility of compliance for imported articles. Notwithstanding this precedent, H.R. 5820 takes the opposite approach and instead of exempting chemicals in imported articles unless there is a specific need for information, the bill would prohibit any exemptions for articles. This framework is unnecessarily burdensome and costly.

## Recall Authority Without Court Action Is Inappropriate

One additional concern RILA has relates to the new authority that the EPA would have in section 7 to order recalls and replacement or repurchase of chemicals, mixtures, and articles that it considers to pose an imminent hazard. This authority goes well beyond that given to Consumer

Product Safety Commission (CPSC)(which is still required to go to court to get such an order). There are no requirements for notice or opportunity for comment before the EPA could issue such an order, and the bill would even delete the definition of what it means to be imminently hazardous. The ability to issue orders such as these should have the protections that come with a court proceeding. RILA believes that the bill should maintain the current recall authority that exists today.

## Preemption

RILA supports a strong federal system for chemical management and as noted above, we support Congressional efforts to modernize TSCA. One reason retailers support this is because we need one consistent standard to apply across the country. Retailers operate in all 50 states and cannot modify their supply chains to accommodate different and conflicting state standards. When Congress adopts a new national chemical management system under TSCA, RILA believes that Congress should ensure it is consistently adopted throughout the country by including federal preemption unless states can show a compelling reason to deviate from the federal standard. A patchwork of different state standards would undermine industry's efforts to offer safe products across the country.

#### Conclusion

In conclusion, RILA members believe H.R. 5820 imposes unworkable burdens on importers and is not implementable in its current form. RILA urges the Committee to work with stakeholders to develop a more effective and workable alternative to modernize TSCA. We look forward to continuing to work with you throughout that process. If you have any questions or concerns, please contact Stephanie Lester, Vice President, International Trade at (stephanie.lester@rila.org) or 703.600.2046.

Sincerely,

Stephanie Lester

Vice President, International Trade

Sepranie Sour



July 28, 2010

The Honorable Bobby Rush Unite States House of Representatives 2416 Rayburn Building Washington, DC 20515

and

The Honorable Ed Whitfield United States House of Representatives 2411 Rayburn Building Washington, DC 20515

Dear Chairman and Ranking Member:

On behalf of The Vinyl Institute, I would like to indicate the vinyl industry is unable to support H.R. 5820, the "Toxic Chemicals Safety Act of 2010," as introduced.

The Vinyl Institute represents U.S. manufacturers of vinyl (also called polyvinyl chloride or PVC) resin, the raw material for myriad durable and energy-efficient building products, non-corroding and non-polluting water and sewer pipe, safety-enhanced electrical wiring, tough and easily cleaned wall coverings and flooring used widely in healthcare, and life-saving medical devices, among other high-value uses.

PVC has been extensively tested and used for decades, and numerous U.S. federal government agencies and reputable standards organizations have examined and confirmed its safety. These groups include: U.S. Food and Drug Administration (FDA), U.S. Consumer Product Safety Commission (CPSC), National Fire Protection Association (NFPA), American National Standards Institute (ANSI), and National Sanitation Foundation. In a regulatory proceeding, the U.S. Environmental Protection Agency (EPA) concluded high molecular weight polymers such as PVC present little or no hazard to human health and the environment. PVC is not listed as a hazardous waste under EPA regulations.

On its environmental performance, the most comprehensive life-cycle studies of PVC and competing materials have shown that PVC's impacts are generally similar to – and can be lower than – those of alternative materials.

Chairman Rush and Ranking Member Whitfield July 28, 2010 Page 2

Vinyl has been used in commerce for more than 50 years with no reports of substantial risk under the Toxic Substances Control Act (TSCA) since it became law.

Some interest groups, however, have called for a ban or phase out of PVC because tiny amounts of dioxins may be produced during manufacturing or in uncontrolled burning. The facts are U.S. dioxin levels have declined continually for decades, while PVC production has soared during this same period. As for end-of-life issues, any material improperly managed will create environmental burdens. Open burning of essentially any material will create persistent, bioaccumulating toxins such as polyaromatic hydrocarbons. Dioxins are produced by almost anything that burns – from trash and wood to fuel in combustion engines. Open burning creates dioxins and many other pollutants whether or not PVC is present.

H.R. 5820 has an unwarranted and disproportional emphasis on our industry judging from the priority substances listed in the working draft. Section 6 legislates regulatory action on substances that are used as a feedstock to produce PVC (vinyl chloride) or additives that give vinyl its flexible properties (phthalates). What is the justification for this? Why are the bill sponsors targeting the PVC industry? Why, among the 85,000 chemicals in commerce, are those found by government reviews to have been used safely for decades in important products singled out as the most toxic?

The vinyl industry has been a leader in worker and environmental health research, and in safety and environmental performance. We are committed to protecting human health and the environment. Our practices and vinyl products help achieve this objective.

H.R. 5820, as introduced, cannot be supported. It should be rewritten before further action is considered. The Vinyl Institute offers its assistance in helping the subcommittee address the provisions of the bill that are unworkable for our industry and others.

Thanks you.

Sincerely.

Gregory J. Bocchi President & CEO

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July 28, 2010

The Honorable Bobby Rush United States House of Representatives Representatives 2416 Rayburn House Office Building Building Washington, DC 20515 The Honorable Ed Whitfield United States House of

2411 Rayburn House Office

Washington, DC 20515

Dear Chairman Rush and Ranking Member Whitfield:

On behalf the National Association of Chemical Distributors (NACD), I am writing to express my deep concern regarding the negative impact H.R. 5820, the Toxic Chemicals Safety Act of 2010, will have on the chemical distribution industry and its customers.

NACD represents more than 250 chemical distribution companies throughout North America. These companies operate approximately 1,500 facilities and employ over 20,500 people. NACD members represent between 80% to 90% of the chemical distribution facilities in the nation and more than 90% of the industry's gross revenue. The membership includes small businesses as well as regional and national companies. Handling, storing, repackaging, and transporting chemicals are all integral parts of the chemical distribution business. Annually NACD members deliver approximately 5.3 million chemical distribution shipments, are responsible for 81 billion pounds of delivered product, and drive over 199 million miles while distributing chemicals.

Earlier this year, NACD came out publically in support of reforming the Toxic Substances Control Act (TSCA). At over thirty-four years old, TSCA has demonstrated in many cases to be an outdated chemicals management system that is need of significant improvements. NACD has advocated for a workable risk-based system that protects innovation and job creation. Unfortunately, H.R. 5820 creates a framework that would place an impossible burden of proof on industry, hampering innovation and sacrificing jobs.

Of particular concern to NACD is the treatment of mixtures in H.R. 5820. Over 70% of NACD Members provide customized chemical mixture processing services to a wide array of customers, including pharmaceuticals, water treatment, and electronics industries. Despite certain improvements in the discussion draft, the treatment of mixtures and articles in the legislation, specifically in regards to the new chemicals program, is problematic in that it would create an unfathomable and unnecessary burden not just on chemical distributors, but the Environmental Protection Agency (EPA) as well. In addition to the regulatory burden, the inclusion of mixtures is also unnecessary in that there is substantial data already available on the individual components of the mixture products.

H.R. 5820 is also problematic in that it does not adequately protect confidential business information. Specifically, the provisions in Section 14 of the legislation requiring disclosures of chemical identity and the components of mixtures would create a framework where very little proprietary information regarding chemicals processed and distributed by NACD Members would remain protected. The weakening of CBI protection would also complicate existing confidentiality provisions between chemical distribution companies and their customers that request customized mixtures for certain products.

In addition to the direct requirements in H.R. 5820 for chemical distributors, there are many indirect impacts simply because of their middleman role in the supply chain. The data generation requirements for other areas of the supply chain, such as manufacturers and downstream users, will strain the already limited resources of many small business chemical distributors. The market pressures on top of the explicit requirements in H.R. 5820 would make the system unworkable for the industry.

Although we are deeply concerned with H.R. 5820, NACD hopes that the Subcommittee continues to work towards creating an improved chemicals management system that emphasizes safety while protecting jobs and innovation in the marketplace. We look forward to working with you to achieve this goal.

Sincerely,

Chris Jahn President National Association of Chemical Distributors



CAL DOOLEY PRESIDENT AND GLO

November 19, 2010

The Honorable Henry A. Waxman Chairman, Committee on Energy and Commerce 2125 Rayburn House Office Building Washington, D.C. 20515-6115

The Honorable Bobby Rush Chairman, Subcommittee on Commerce, Trade and Consumer Protection 2125 Rayburn House Office Building Washington, D.C. 20515-6115

The Honorable Joe Barton Ranking Minority Member Committee on Energy and Commerce 2232A Rayburn House Office Building Washington, D.C. 20515-6115

Dear Messrs. Waxman, Rush and Barton:

The American Chemistry Council (ACC) appreciates the opportunity to address the written additional questions for the record of the Subcommittee on Commerce, Trade, and Consumer Protection's July 29, 2010, hearing on the Toxic Substances Control Act (TSCA).

The attached responses clarify ACC's views on H.R. 5820, the Toxic Chemicals Safety Act of 2010. More importantly, our responses confirm ACC's continuing commitment to TSCA modernization. In our view it is critical that progress continue to be made to revise TSCA.

We appreciate the effort you and your staffs have made to begin the discussions around modernizing TSCA. We also appreciate that H.R. 5820 addressed some of the concerns ACC and others raised with the original House discussion draft, particularly relating to tiered testing approaches and the ability to renew CBI claims. Although our view is that H.R. 5820 as a whole is not a workable approach to revising TSCA, we look forward to working with you toward a constructive solution that protects public safety, innovation and jobs.



ACC believes that TSCA modernization must been considered from a systems approach. The scope of the legislation, for example, cannot be read out of context with provisions related to prioritizing chemicals for review and the safety standard for decision-making. In our view, a modernized chemical management system must provide for an integrated and practical framework for prioritizing existing chemicals in commerce, determining the safety of priority chemicals for their intended uses, imposing a range of risk management controls to assure safety, and enhancing certain aspects of the new chemicals program. All of the pieces in this complex system must work together in a way that EPA can implement in a science-based and timely manner that not only assures health and environmental protection, but provides business certainty and support for the innovation that has characterized the U.S. business of chemistry for so long.

Please let us know if you have any questions on ACC's responses to your additional questions.

Sincerely

Cal Dooley

Attachment

## The Honorable Henry A. Waxman and the Honorable Bobby L. Rush

1. You have stated that one of ACC's highest priorities is modernizing how government assesses the safety of chemicals in commerce. You have said that your members' number one commitment is to the safety of their products. That's why, you've said, ACC wants TSCA "improved and enhanced." Please explain how TSCA should be improved and enhanced. Specifically, please describe what aspects of TSCA are currently deficient and most in need of being improved?

**RESPONSE 1.** ACC and its member companies are committed to improvements in TSCA that enhance health and environmental protection and the competitiveness of the U.S. business of chemistry and the jobs associated with it. In our view these are complementary objectives. The specific elements of TSCA which should be addressed include:

- EPA's chemicals program under TSCA suffers from a lack of clearly established priorities. The rationale for the Agency's focus on any particular chemical or class of chemicals is not often apparent. There is no requirement that EPA consider existing, available information in setting priorities or prior to issuing a test rule.
- Enhancements in the data available to and considered by the Agency.
- Improvements in the information reported to EPA to more accurately reflect the chemicals that are actually in commerce today.
- Enhancements to ensure appropriate protection of Confidential Business Information while ensuring that appropriate information is available to the public.
- A clearer delineation between a safety decision by EPA and the risk management measures needed to address the concern.
- Clearer Congressional direction to EPA on implementation of the statute to create greater
  certainty for both the public and the industry. The perception that TSCA is ineffective in
  protecting health and the environment is based in part on EPA's constrained
  interpretation of some of its authority (e.g., Sections 4 and 6). Ironically, EPA has
  indicated in several Chemical Action Plans that it intends to pursue regulatory actions
  under these authorities, apparently indicating that the Agency is in the process of
  reinterpreting some of its authorities.
- 2. In your written testimony, you stated that the H.R. 5820 "creates additional burdens that do not contribute to and, in fact, detract from making advances in safety." The bill requires manufacturers and processors to prove that their new and existing chemicals are safe for intended uses and mandates greater disclosure of chemical identity, health and safety data and use and exposure information to downstream users, workers and the public. The bill would also limit exposure to harmful chemicals such as PBTs (chemicals that are persistent, bioaccumulative, and toxic) and provide incentives for the development of safer alternatives. Please explain why you believe these requirements detract from making advances in safety.

**RESPONSE 2.** This question restates broad objectives for H.R. 5820. ACC agrees with those objectives, but we disagree with specific elements and detail in the bill that lead to our conclusion that the bill will detract from safety advances. H.R. 5820 generally assumes that industrial chemicals pose the same type of risks that pharmaceuticals and pesticides might have, and therefore a regulatory regime similar to that for pharmaceuticals or pesticides is appropriate. That assumption is not a warranted, however. Unlike pesticides or pharmaceuticals, chemicals regulated under TSCA are not designed to be biologically active. Instead, industrial chemicals are designed to deliver functions to products and processes, and therefore, as a general matter, they don't pose the same degree of risks assumed for pesticides and pharmaceuticals. Many industrial chemicals are limited to specific functions, with limited exposure and use patterns. They are not intended, and often do not have any, significant exposure. Indeed, many industrial chemicals are minor variations of similar chemistries.

3. Further, H.R. 5820 requires all chemicals to be subject to an aggregate exposure assessment, and strongly suggests that EPA require cumulative assessments as well. These requirements (for all chemicals) would be significantly burdensome, especially given the multiple uses of TSCA chemicals (as contrasted, say, with pesticides). These requirements would necessarily slow the development of new advances in chemistry, particularly since even a "safer" alternative (even one that is a variation of an existing chemical) would have to meet the same requirements under the bill. The bill purports to create a preferential regulatory track for "safer" chemicals but ignores the fact that under certain uses/exposures, even the "safest" chemical could create potential exposures, some of which might still need to be managed in some way. In short, the bill establishes significant requirements that would, in our view, make it extremely difficult to prove either existing or new chemicals are safe for their intended uses. That in turn, could push manufacturing of existing chemicals off shore and slow the process of developing and bringing to market new chemicals. In your written testimony, you stated that the safety standard in this bill sets "an impossibly high hurdle for all chemicals in commerce." You also stated that ACC and its member companies "are committed to continuing to work with this committee and with other stakeholders to modernize the law in a meaningful and effective way." Yet, to date, ACC has not presented any specific recommendations for modifying the proposed standard or formulating an alternative standard. While you made reference at the hearing to the Canadian system of prioritization as a model for U.S. reform, you did not specifically-comment on or endorse the safety standard applied by Canadian law.

There is near universal agreement that the existing standard, which requires EPA to show that a chemical presents an "unreasonable risk of injury" to health or the environment before taking any regulatory action, is unworkable and inadequate to protect the public health.

a. What specific safety standard does ACC propose for ensuring that chemicals in commerce are safe for their intended uses? Please explain why such a proposed standard would be a better approach than the existing standard and than the standard proposed in H.R. 5820. **RESPONSE 3(a).** The question suggests one workable option for a safety standard, a focus on "safety for their intended uses." That formulation puts the focus on the exact question that EPA's review of a chemical should address — whether a chemical is safe for that use, and if not, what steps need to be taken to assure that it can be used safely. Moreover, the formulation does not force an impossible probative standard on industry or the Agency, which H.R. 5820 would demand in the requirement that there be a "reasonable certainty of **no** harm," taking into account aggregate exposure and considering cumulative effects (emphasis added). Even the most innocuous substances would have difficulty meeting this standard

b. Has the Canadian approach to regulating chemicals proven workable for industry? Does it adequately protect public health and the environment? Does ACC support adopting the Canadian approach to regulating chemicals here in the United States?

RESPONSE 3(b). ACC's reference to the Canadian Chemical Management Program (CMP) was intended to highlight the value of a system that prioritized chemicals in commerce and that makes a concerted effort to address the priorities. The CMP prioritization process reviewed 23,000 substances on the Canadian Domestic Substances List (the counterpart of TSCA's Inventory), set aside 19,000 as no or low priority for further review, and further identified 500 chemicals as the highest priorities for review. While the broad structure of the CMP holds important lessons for the United States, specific requirements of the Canadian statute (the Canadian Environmental Protection Act) will not translate readily into U.S. law or practice.

c. There is currently no consensus on the number of chemicals currently manufactured or imported for distribution in commerce. This is an important question because it helps indicate the magnitude of the challenge involved in TSCA reform. As the trade association representing the manufacturers of chemicals, ACC is perhaps in the best position to answer this question. Please provide the number of chemicals currently manufactured or imported for distribution in commerce. If ACC does not have an accurate number, please provide ACC's best estimate of the number with a description of how this number was calculated.

RESPONSE 3(c). The TSCA Inventory is a historical database of chemicals introduced into commerce. The most reliable information on the number of chemicals currently in U.S. commerce is the periodic Inventory Updates. The 2006 TSCA Inventory Update identified approximately 7,000 chemicals on the public inventory as having been manufactured or imported into the United States in volumes greater than 25,000 pounds, which is the reporting threshold. The number of chemicals in commerce in volumes below 25,000 pounds is unknown. The total number of chemicals in commerce is likely well below the 84,000 on the Inventory. ACC believes modifications in the Inventory reporting requirements are necessary in order to better establish that number.

4. In your oral testimony, you were critical of the provisions of H.R. 5820 that require EPA to develop a list of priority chemicals that would be the first subject to a safety determination, based upon a set of criteria outlined in the legislation. Yet ACC, and individual member companies of ACC, have stated that prioritization of chemicals for review by EPA is an

important component of TSCA reform legislation. What is ACC's specific objection to the prioritization provisions of H.R. 5820?

a. Does ACC object to the criteria that EPA would be required to use for the prioritization? If the answer is yes, please state which criteria ACC objects to (and why) and which additional or alternative criteria ACC believes should be included.

RESPONSE 4(a). Prioritization requires consideration of both hazard and exposure information. The criteria reflected in H.R. 5820 may be relevant to an individual substance, but they are predominantly hazard-based criteria that inappropriately focus EPA's prioritization effort on hazard alone. The prioritization process should also require EPA to consider exposure and use as well. All existing, available information is relevant in making a screening prioritization decision, including information on use and exposure patterns. Major data needs (not simple data gaps) can be identified in such a process and can inform prioritization decisions.

b. Does ACC object to the notion of *publicly* listing 300 chemicals as priorities for assessment? If so, please explain what ACC believes would be the correct approach for prioritizing chemicals for review. Would it be preferable for EPA to develop a private list that is not made available to the public?

RESPONSE 4(b). ACC believes that a public list of priority chemicals should be developed, but that it should not rely on an artificial number. Under H.R. 5820, the list of 300 is a permanent, rolling list. It is well-established that there can be market impacts from the mere appearance of a substance on a "priority" list, even before it has been established that there are risks of harm that are not otherwise managed. In order to minimize those impacts, a robust prioritization system – one that allows EPA to quickly screen chemicals for priority based on hazard, use and exposure information, and one that creates a more dynamic information sharing environment – is preferable.

c. Does ACC object to the *number* of chemicals (300) that EPA would be required to initially prioritize? If so, what number of chemicals does ACC believe should be included on such a priority list?

**RESPONSE 4(e).** ACC believes there is value in granting EPA authority to establish an initial priority list and moving quickly to assess those substances. The initial priority list or a longer term priority list need not be limited by a specific number. The number of chemicals on the priority list is a factor of the time the Agency requires in order to make a determination.

d. Does ACC object to the amount of time that EPA is given under the bill to assess the initial list of 300 chemicals? Assuming that EPA has adequate resources to complete whatever prioritization and assessment requirements are established under the bill, what does ACC believe is a reasonable number of chemicals that EPA should be required to assess annually, or within the 30 month period established under H.R. 5820?

**RESPONSE 4(d).** ACC does not have sufficient information to determine what would be a reasonable number of safety assessments EPA should be expected to complete annually. Under the Food Quality Protection Act, EPA was required to complete some 700 assessments over a 10 year period. Under H.R. 5820, EPA would be required to complete 300 assessments within 30 months, with each subsequent chemical added to the list assessed with 30 months of listing.

- 5. In response to a question from Rep. Sarbanes about how we know that chemicals are safe if they are not assessed based upon a set of basic data, you indicated the desirability of focusing on chemicals such as those that may be carcinogens, endocrine disruptors, or PBTs, and he noted that there are a number of lists in existence identifying such chemicals.
  - a. Would ACC support prioritizing for assessment the chemicals that are on such lists, and would ACC prefer that approach to requiring EPA to develop a list for priority assessment?

**RESPONSE 5(a).** As noted above, certain hazard characteristics should be relevant to the Agency's prioritization decisions. The mere fact that a substance has such characteristics, however, is not determinative of that substance's relative priority for further review and assessment. Use and exposure patterns are also relevant to priority decisions.

b. Has ACC identified a list of chemicals that it believes warrant prioritization for assessment? If so, on what criteria has ACC based its identification of those chemicals?

**RESPONSE 5(b).** ACC has not identified a list of chemicals that warrant prioritization for assessment.

c. Does ACC agree that the 13 chemicals or groups of chemicals identified for priority assessment under Section 6 of H.R. 5820 merit prioritization? If not, please state which of those chemicals ACC believes are not a priority for assessment, and why not.

**RESPONSE 5(c).** ACC does not agree that the 13 chemicals or groups of chemicals identified in Section 6 of H.R. 5820 warrant a high priority in the absence of an EPA review of the existing, available information, consideration of other information on anticipated use and exposures, and a better understanding of risk management actions and practices already taken for those chemicals. It appears the list in Section 6 was compiled solely on the basis of hazard characteristics, not risk. ACC believes that EPA, not Congress, should apply its expertise to identify high priority chemicals.

- ACC has long taken the position that regulation of chemicals under TSCA should be riskhased.
  - a. Does the ACC consider the safety standard under H.R. 5820 to be risk-based? If not, please explain what specific provisions of the bill ACC considers to be non-risk-based.

**RESPONSE 6(a).** Although it appears that the safety standard in H.R. 5820 is intended to be risk-based, it establishes a stringent standard that appears to require proof of absolute safety, or zero risk. The legislative history of TSCA is replete with an acknowledgement that establishing zero risk is impossible (leading Congress at that point to focus on "unreasonable" risks).

b. The "reasonable certainty of no harm" standard originated in the Food Quality Protection Act (FQPA). Does ACC believe that FQPA is a risk-based statute? If ACC considers FQPA to be risk-based and does not consider H.R. 5820 to be risk-based, please explain what specific provisions in H.R. 5820 distinguish it from FQPA.

**RESPONSE 6(b).** The FQPA applies to a narrow range of products that have a narrow range of exposure pathways (through the application to crops and consumption of food). H.R. 5820 does not reflect the inherently broader and much more complex arena of industrial chemicals, in which a single chemical can have many uses and may have multiple exposure pathways. In our view, the net effect of the approach is a "zero-risk" standard.

- 7. Risk assessment is commonly understood (in the context of chemical safety) to mean an analysis of both the hazard posed by one or more chemicals and the degree of exposure to that chemical or chemicals. In your testimony, you were very critical of the bill's requirement that EPA consider aggregate exposures to a chemical as part of its safety determination.
  - a. How does ACC propose for EPA to assess the true risk of a chemical if consideration is not given – to the greatest extent possible – to the total exposure to that chemical, including from different sources?

**RESPONSE 7(a).** ACC believes that requiring an assessment of the total exposure to a chemical, including all sources (which would include natural sources) should only be required in exceptional circumstances. Aggregate exposure assessment assumes a perfect ability to know and quantify exposures for all chemicals from all sources. Aggregate exposure assessments should not be routinely required of all chemicals.

b. Is it ACC's position that each use of a chemical should be assessed individually and separately, without taking into account other sources of exposure to the same chemical? How would such an approach provide a useful or sufficiently health-protective risk assessment?

**RESPONSE** 7(b). ACC believes a more practical approach would have EPA focus on the most significant exposure pathways within use categories in assessing the safety of a chemical for its intended use. Where known and relevant to that exposure pathway, other sources of exposure can also be taken into account.

c. If such an approach is not proposed by ACC, what does ACC propose?

RESPONSE 7(c). See response 7(b) above.

d. Risk assessment under the Food Quality Protection Act currently includes consideration of aggregate exposures. Does ACC consider this aspect of FQPA to be unworkable or not of value to risk assessment?

**RESPONSE 7(d).** See response 7(a) above. It is also ACC's understanding that the consideration of aggregate exposures under the FQPA only applies to food use pesticides.

- 8. In his testimony, Dr. Denison suggested that, in considering innovation of new chemicals, safety should be a criterion that is built into the design of new chemical products and should be part of the definition of what constitutes innovation. ACC's testimony included statements of serious concern about requiring new chemicals to undergo a safety standard determination or to be subject to minimum data requirements prior to being allowed onto the market, based in part upon concerns that such requirements would stifle innovation.
  - a. Do ACC's member companies take steps to ensure the safety of new chemicals prior to their submission to EPA under the existing new chemical review process? If so, please describe these steps.

RESPONSE 8(a). All ACC members take steps to ensure the safety of new chemicals. Safety considerations inform the development of new chemicals from the very beginning of the process, including safety considerations in processing, use, distribution and disposal. In addition to the requirements of TSCA and other relevant environmental, health and safety statutes, the U.S. tort liability system establishes an important incentive for manufacturers of new chemicals to address safety considerations. No single process applies across the industry, but in ACC's view, a TSCA regulatory system that establishes initial expectations for relevant hazard, use and exposure data or information would help establish confidence in the industry's practices. The approach should not establish a single, inflexible data or information requirement for all new chemicals, but should be geared toward the anticipated use and exposure patterns for a substance.

b. Do all ACC members follow the same practice? If different companies have different practices, please describe how these practices vary across the industry.

RESPONSE 8(b). See response 8(a) above.

c. If companies are currently taking steps to ensure the safety of all new chemicals that are being proposed for use in commerce, would a requirement that these new chemicals meet a safety standard have to necessarily stifle innovation? If you believe it would, please explain why.

**RESPONSE 8(c).** In ACC's view, determining that a chemical is safe for intended uses is an appropriate step in the development, manufacture and use of a substance. The requirement to

establish absolute safety under the safety standard established in H.R. 5820, and the inherent delays that meeting that standard implies, would tend to stifle innovation.

d. If the safety of new chemicals is not determined prior to their introduction into commerce, are you concerned that consumers could experience unsafe exposure to chemicals? If not, why not?

RESPONSE 8(d). TSCA's new chemicals PMN program is generally viewed as an effective mechanism for the review of new substances. When chemicals are first introduced into commerce, they are typically at low volumes and hence the potential for exposure should typically be low as well. If that is not the case, EPA can request more information about the chemical before approving it as a new chemical. TSCA and other applicable statutes, and our tort liability system, create powerful incentives to determine the safety of new chemicals prior to their introduction into commerce. If consumers experience unsafe exposure to chemicals, are you concerned that this would have a negative effect on your industry? If not, why not?

**RESPONSE 8(e).** ACC is not certain what this question is intended to address. For our part, we believe the public, the entire chemical value chain, and the government should have confidence that they can safely use chemical products. Appropriate modifications to TSCA can help achieve that goal.

9. It takes a significant amount of time to bring a new chemical to market. For instance, the new chemical must be developed, it must undergo significant testing to determine its suitability for commercial application, the process for manufacturing the chemical at commercial scale must be developed, a factory must be built or modified to manufacture the chemical and a market must be found or developed for its intended sale. Please provide information regarding the typical lead-time involved in bringing a new chemical to market. To the extent possible, please provide information regarding the time involved with each aspect of bringing a new chemical to market.

**RESPONSE 9.** It is not possible to detail the many different elements and timelines applicable to the development of a new chemical in the many different markets and uses to which industrial chemicals are put. Generally speaking, the development of a new chemical and TSCA approval of a pre-manufacturing notice (PMN) can take years. It should be noted that not all PMNs are approved in the 90-day period outlined in TSCA; many can take significantly longer.

10. Is it ACC's position that all chemicals currently used in commerce are safe for their intended uses? If so, please provide the basis for this position. If not, please provide available information about such chemicals, including, if possible, the identity of any such chemicals that ACC believes are not safe for their intended uses.

**RESPONSE 10.** ACC believes that chemicals in commerce are safe for their intended uses. The significant improvements in health, the environment, and our standard of living over the last century stand as important evidence that chemicals can be and are being used safely.

- 11. Based on feedback received on the discussion draft during the stakeholder process, the committee has incorporated or revised several provisions specifically to address industry concerns.
  - a. H.R. 5820 requires EPA to promulgate a rule to establish a minimum data set. ACC specifically requested that this provision be included during the stakeholder process. Does ACC support this provision? If so, why? If not, what not?

**RESPONSE 11(a).** ACC agrees that establishing minimum expectations for data and information on new chemicals is appropriate, assuming that use and exposure patterns and considerations inform what data and information is provided. TSCA revisions should not impose an inflexible minimum data set requirement.

b. H.R. 5820 incorporates penalties for inappropriate claims of confidentiality, as suggested by ACC and other industry stakeholders, in lieu of automatic EPA review of each claim. Does ACC support this provision? If so, why? If not, why not?

RESPONSE 11(b). ACC supports enhancing public access to chemical health and safety information. This objective, however, must be balanced against the need to protect legitimate confidential business information. To that end, ACC supports the concept of an up-front justification for claims of confidentiality and opportunities to re-substantiate those claims as appropriate. Penalties may be appropriate to prevent willful misrepresentation of CBI claims.

c. In your testimony, you raised concerns about the treatment of mixtures in H.R. 5820. EPA's authority over mixtures is now wholly discretionary under this legislation, as requested by industry stakeholders and as is the case under existing law. Does ACC support this approach? If so, why? 1f not, why not?

**RESPONSE 11(c).** ACC disagrees that H.R. 5820 provides EPA wholly discretionary authority over mixtures. ACC reads the bill to subject new mixtures to the same requirements as other new chemicals.

d. H.R. 5820 excludes articles from automatic coverage, as requested by industry stakeholders. Does ACC support this approach? If so, why? If not, why not?

**RESPONSE 11(d).** In ACC's view, additional clarity is required on the extent to which EPA has regulatory authority over articles, the jurisdictional scope of such authority, and the criteria and circumstances in which EPA would be expected to exercise that authority.

e. H.R. 5820 includes a provision requiring that importers meet the same requirements with respect to chemical safety that domestic manufacturers must meet. Given the importance of ensuring a level playing field for domestic manufacturers to compete with foreign manufacturers, does ACC support this provisions? If so, why? If not, why not?

RESPONSE 11(e). ACC's concern is that the provisions of H.R. 5820 create an incentive to develop new chemicals and products outside the United States and then import the finished

goods made with or containing the chemical substance in question. Appropriate modifications to TSCA should create an environment in which manufacturers have appropriate incentives to develop, manufacture, and use the benefits of chemistry in the United States.

- 12. H.R. 5820 provides for expedited review and exposure reduction for persistent, bioaccumulative, and toxic chemicals (PBTs) and authorizes EPA to grant critical use exemptions where appropriate. Does ACC believe that PBTs deserve special concern and regulatory treatment based on their intrinsic characteristics? Does ACC support the bill's treatment of PBTs? If so, why? If not, why not?
- **RESPONSE 12.** PBTs are a class of chemicals that warrant review. However, they are but one class of chemicals, and not all PBTs may require expedited review. EPA should have the discretion to prioritize all substances for review, including PBTs, where their use poses a risk of harmful exposure in use.
- 13. In your written and oral testimony on H.R. 5820, you stated that EPA's TSCA program would be unworkable if this legislation were enacted. H.R. 5820 extends a number of deadlines in response to industry concerns about the timing of data development and submission. For example, submission of the minimum data set is staggered over a 5 year period based on production volume and other factors, while deadlines for EPA action also have been extended to ensure feasibility. Does ACC agree that extending the submission deadlines improves workability? If so, why? If not, why not?
- **RESPONSE 13.** ACC agrees that compliance deadlines should be addressed in revisions to TSCA, with a view to efficiently and effectively implementing the amendments. Extended compliance deadlines can improve workability but the cumulative burden of the requirements on EPA and the industry must also be addressed.
- 14. In your testimony, you state that the safer alternatives provision is unworkable and would stifle innovation. Does ACC agree that TSCA should address safer alternatives? If so, why? If not, why not? Please explain specifically why ACC believes that the safer alternative provisions in H.R. 5820 would stifle innovation. What approach would you recommend for identifying safer alternatives that would be workable, foster innovation and protect health and the environment?

RESPONSE 14. The safer alternatives provisions of H.R. 5820 are grounded in the assumption that there are a host of "safer" substances that simply need an improved regulatory environment to be brought to market. ACC questions that assumption. H.R. 5820 establishes significant regulatory hurdles to such "safer" chemicals, and in fact requires that such substances meet all the requirements as "other" new chemicals. Under the framework proposed in H.R. 5820, "safer" chemicals are identified on the basis of some reduction in one or more hazard characteristics. That notion is unrealistic, and belies the fact that "safer" or "greener" chemicals can also address critical elements such as process concerns, sustainability considerations, and even exposure potential.

15. In your testimony you suggested that disclosure of chemical identity and health and safety data to downstream users – even where it is subject to the protections of Section 14 1 imiting disclosure of confidential information – would hurt innovation and threaten the commercial interests of the chemical industry. Mr. Williams testified that these disclosures have the opposite effect, because when downstream users, consumers and the public are informed about the chemical constituents of the products that they use and the associated health and safety effects, they will demand safer products, which will drive innovation.

Does ACC agree that manufacturers and processors should disclose health and safety information to downstream users, consumers and the public? If so, why? If not, why not? Why do you disagree with the assertion that disclosure will foster innovation and lead to safer chemicals in commerce? If you oppose such disclosure, how should downstream companies ensure that their products are safe, without basic information on the nature and toxicity of chemicals contained in those products?

**RESPONSE 15.** ACC has long held the view that health and safety data should not be claimed confidential. TSCA Section 14 makes clear that EPA can disclose confidential information when health and safety is threatened. There are circumstances in which chemical identity, or the identity of a company, appropriately require protection. The disclosure of information properly claimed confidential jeopardizes innovation because competitors by definition will have access to that information. As we outline in the response to Mr. Barton's question number 5, the approach taken in H.R. 5820 has implications for the competitive position of the chemical industry.

16. H.R. 5820 requires EPA to identify and address localities with populations that are disproportionately exposed to toxic chemical substances. Does ACC agree that EPA should give special consideration to disproportionately exposed populations? If so, why? If not, why not?

**RESPONSE 16.** ACC believes that the Environmental Protection Agency has considerable authority under a number of statutes to address issues related to exposures to toxic chemicals in particular localities.

- 17. Industry representatives have suggested that legislation should exempt chemicals from the requirements of TSCA where there is consensus that those chemicals are inherently safe, even under the worst case scenarios of exposure. H.R. 5820 includes an exemption for chemicals that allows for such an analysis and exemption. In your testimony, you suggested that this provision is unworkable.
  - a. Why do you believe that the intrinsic properties exemption is unworkable?

**RESPONSE 17(a).** ACC's position has been very clear. The existing exemptions in TSCA – for certain polymers, low release/exposure substances, and the like – appear to have worked well. In our view, the exemptions provisions should allow EPA to make a considered judgment that some substances either do not have inherent hazard properties, or do not pose a significant

risk of exposure in use. H.R. 5820's approach, however, raises concerns that no chemical would ever qualify for the exemption.

b. What specific alternative approach would you suggest for identifying and exempting intrinsically safe chemicals that is also protective of health and the environment?

## RESPONSE 17(b). See response 17(a) above.

- 18. In your testimony, you suggested that, under H.R. 5820, new uses of polysilicates (a group of polymers) could be prevented if EPA did not complete a safety determination within the timeframes established by the bill. Yet the bill creates an explicit carry-over for the existing polymer exemption under the Act, and permits the exemption to continue in effect as long as the chemicals covered are in fact found to be safe based on their intrinsic properties.
  - a. Given this provision, do you believe that the polymer exemption would not continue under H.R. 5820? If not, why not?

RESPONSE 18(a). ACC assumed, properly, that if a polymeric substance is identified as a priority for review, the failure to complete a safety assessment would effectively bar the introduction of new uses of that substance. The explicit carry-over of the polymer exemption under the bill does not, in our view, preclude EPA identifying such as substance as a priority for review, or, in appropriate circumstances, deciding that a polymer could be unsafe for an intended use

b. If a polymer is found by EPA to not meet the specifications of the new provision on chemicals that are intrinsically safe, by definition that polymer could be unsafe for its intended use. In such a circumstance, why should the exemption continue?

## RESPONSE 18(b). See response 18(a) above.

c. Is your organization aware of, or have any evidence of, any polymer that could be unsafe for its intended use? If so, please provide such information to the Committee.

**RESPONSE 18(c).** ACC is certainly aware that the molecular weight of a polymeric substance has implications for possible biological activity, but is not in and of itself determinative of safe

- 19. One issue that arose during the hearing was the question of how reforming TSCA might affect efforts to reduce the incidence of cancer in the U.S. A number of chemicals have been identified by the National Toxicology Program (NTP) and/or the International Agency for Research on Cancer (IARC) as known human carcinogens. For many of these chemicals, exposure is widespread within the United States.
  - a. What authority should EPA have under a revised TSCA to address the threats posed by known human carcinogens where there is evidence of widespread exposure? How should TSCA be modified to better address the risks posed by these chemicals?

**RESPONSE 19(a).** ACC believes that modifications to TSCA that ensure a robust prioritization and assessment program will also apply to carcinogens. We assume that carcinogenicity would be one of the criteria by which EPA would identify priority substances for review, in conjunction with information on the use and exposure patterns.

b. Do you think the changes to TSCA proposed in H.R. 5280 are sufficient, go too far, or do not go far enough? Please explain.

**RESPONSE 19(b).** We think that many of the changes proposed in H.R. 5280 (as discussed in response to each of the questions above) fail to appropriately focus EPA on priority chemicals, impose requirements out of proportion to the policy objective, and create barriers to the practical implementation.

## The Honorable Joe Barton

1. Would it be expensive for chemical companies to comply with H.R. 5820?

**RESPONSE 1.** ACC has not compiled a specific estimate of the costs associated with H.R. 5820. However, the direct costs associated with generating and submitting the additional data and information required under the proposed bill, and the indirect costs associated with market impacts (e.g., those impacts associated with a mere listing of a chemical as a "priority chemical") are substantially higher than under existing TSCA law and practice.

2. Would this legislation discourage innovation and new products that would be sold in the U.S. market?

RESPONSE 2. ACC believes that as drafted, H.R. 5820 will discourage innovation and new product introduction. Minimum data set requirements can be significant. For example, the full screening data set required in the U.S. High Production Volume challenge program (which requires less data than that outlined in H.R. 5820) would run approximately \$1 million per chemical. Applying those requirements to new chemicals, before a market has even been established, would discourage the development and introduction of new chemistries. ACC notes that these data requirements would apply to all chemicals, including so-called "safer" chemicals.

3. Would this legislation significantly increase the costs of the products sold throughout the United States economy?

RESPONSE 3. Chemicals are the building blocks of the U.S. economy. Some 96% of all manufactured goods are touched in some way by chemistry. It stands to reason that if the costs of manufacturing or using chemicals increases significantly as a result of a regulatory regime like that contemplated in H.R. 5820, the costs of products that rely on chemistry will similarly increase.

4. Would the increased costs of complying with this legislation competitively disadvantage U.S. chemical companies vis-à-vis foreign competitors?

**RESPONSE 4.** The global business of chemistry is intensely competitive. While the costs of feedstocks and energy are the largest components of the industry's cost structure, the costs associated with regulatory requirements are increasing and could be a factor in decisions around the manufacture of a specific chemical. For example, the costs of completing a minimum data set of the type contemplated in H.R. 5820 could run into the millions of dollars. By definition new chemicals have not yet established a market but would face a significant barrier by virtue of the minimum data set alone. Assuming new chemical introduction is an indicator of competitiveness – and that is an area in which the United States has had a significant global advantage – H.R. 5820 would likely impose a competitive disadvantage on the U.S. business of chemistry.

5. Would the new disclosure requirements make it easier for foreign competitors to obtain proprietary information, also putting U.S. companies at a competitive disadvantage?

**RESPONSE 5.** The limitations on the protection of confidential business information in H.R. 5820 could have the effect of making it easier for competitors to obtain proprietary information. For example, under section 8 of the House draft, every manufacturer and processor must declare the chemical identity, specific facility where the substance is produced or processed, all known uses, production volume for each of the uses, and a description of the byproducts associated with the manufacture, processing, use or disposal of each substance or mixture. Immediately upon filing this declaration, every competitor can have access to this information with a simple FOIA request.

It is well established that the mosaic of information reported to the government under various programs, and which may not qualify individually for CBI treatment, can still implicate proprietary interests. H.R. 5820 would exacerbate that problem. See, e.g., Government Accountability Office, "Environmental Information: EPA Could Better Address Concerns About Disseminating Sensitive Business Information," (GAO/RCED-99-156, General Accounting Office, June 1999). The rapid growth of the Internet and other electronic means of disseminating information, the increasing use of competitive intelligence gathering, and the increased potential for attacks on cyber security measures are among the reasons why ACC has a heightened concern about the appropriate protection of information. ACC is committed to seeking the right balance in the disclosure of information that can enhance public and government access to chemical information.

6. How important is the export market to your members? How would this bill impact their ability to continue their sales overseas?

RESPONSE 6. The U.S. chemical industry's global competitive position results in large part from the ability to serve foreign markets. The chemical industry continues to be one of the top exporting sectors in the U.S. According to U.S. Department of Commerce statistics, total U.S. exports of chemicals to the rest of the world were valued at \$145 billion. Since 2002 our industry has posted a trade deficit, in contrast to its positive trade balance since the 1920s. While the industry reduced its trade deficit to only \$138 million in 2009, we believe that H.R. 5820 would significantly increase the cost of U.S. chemicals, potentially increasing our trade deficit.

7. How should the EPA handle the influx of REACH data on 3,000 chemicals expected in 2010? Considering the requirements in H.R. 5820, should information on chemical substances and mixtures from foreign countries be taken into account by EPA? If you support using this data, what is your opinion of ensuring these studies are of high scientific quality and relevance?

RESPONSE 7. Under the REACH program, registration dossiers on high volume chemicals and certain high hazard chemicals are due November 30, 2010. The registration process will continue through June 2018 for lower volume substances. To the extent that REACH registration dossiers contain public information, EPA should be able to leverage that information and augment the information the Agency has available on any particular substance. ACC believes that in general information from foreign chemical regulatory systems can be appropriately leveraged to prevent duplication of cost and effort.

ACC recognizes, however, that TSCA currently prohibits EPA from sharing and receiving confidential information from other governments. We believe EPA should have the authority to

further augment its databases with such information, assuming the United States government and CBI claimants can be assured that foreign governments afford the information protection comparable to that provided by EPA under TSCA. In the meantime, ACC welcomes EPA's efforts to conclude a Memorandum of Understanding with the European Chemicals Agency. That effort should help in better understanding the REACH system and the lessons both agencies can apply from their respective experience.

8. What kind of pressure does the U.S. chemical industry face from competition overseas? How would H.R. 5820 affect the ability of ACC's members to compete in the global economy?

**RESPONSE 8.** The global business of chemistry is intensely competitive. ACC believes that as drafted, H.R. 5820 establishes a disincentive to introduce new chemicals in the U.S. market. The minimum data requirements of H.R. 5820 would impose significant costs, and would likely move new chemical introduction outside the United States.

9. You testified that the bill's treatment of importers is unworkable. If unchanged, how would it affect U.S. manufacturers that depend on imported chemicals?

RESPONSE 9. H.R. 5820 requires importers to prove "no harm" from an imported substance, the same standard applied to domestically produced chemicals. However, that standard creates an important disincentive to import. As an example, assume that a foreign manufacturer has made a substantial investment to comply with Europe's REACH requirements. It is far from certain that compliance with REACH will equate to compliance with H.R. 5820 approach (indeed, it can be argued that H.R. 5820 establishes a higher safety standard than is applied under REACH). ACC believes a better standard would focus on the safety of a chemical substance (whether imported or not) in its intended use. To be clear, ACC is not advocating a lower standard of protection for imported substances. Our industry is a net importer of chemicals, particularly from Europe, and to a large extent those imports are intra-company transfers.

10. What are "green chemicals" and how prevalent are they currently in the chemicals industry?

**RESPONSE 10.** "Green" chemistry and engineering is a process of considering multiple factors and trade-offs in chemical synthesis, manufacturing, use and disposal. The factors that influence "green" chemistry include health and environmental safety, energy efficiency, water efficiency, exposure and use considerations (including function), and quality, among others. There is no single definition of a "green" or "safer" chemical.

11. Are "green chemicals" intrinsically safer?

**RESPONSE 11.** So-called "green chemicals" are not necessarily intrinsically safer than other chemicals. For example, some "green chemicals" might improve energy efficiency in a given chemical process but have hazard characteristics similar to other chemicals. As ACC has frequently noted, the hazard characteristic of a substance alone (presumptively, the indicator of a "safer" chemical under H.R. 5820) is not sufficient to properly assess the risk of exposure to a substance in a given use.

12. Is there a distinct difference between TSCA-regulated chemicals and FIFRA-regulated pesticides, particularly with regard to human exposure?

**RESPONSE 12.** As we noted in our response to Mr. Waxman and Mr. Rush (question number 2), there are significant differences between TSCA-regulated industrial chemicals and FIFRA-regulated pesticides, notably in the use and exposure patterns for those substances.

13. You testified that the National Academy of Sciences report "Science and Decisions" makes some useful recommendations but that others are not based on the best available science. Which NAS recommendations are not based on the best available science? Please explain.

**RESPONSE 13.** ACC believes that the NAS Report's recommendation to treat non-carcinogenic substances in a manner identical to carcinogens (e.g., the non-linear low dose threshold theory) is not supported by the best available science.

14. You testified that you believe there are advantages to the Canadian system of chemical regulation. Could you please explain what those advantages are and clarify whether ACC supports importing the Canadian chemicals management program into the U.S. to replace TSCA?

**RESPONSE 14.** As outlined in the response to question 3(b) raised by Mr. Waxman and Mr. Rush, the Canadian Chemical Management Program provides some important lessons on approaches to prioritizing a large number of chemical substances for review. Not all elements of the Canadian program will translate well into U.S. law and practice, but the general structure of a program that prioritizes, assesses, and regulates where necessary substances in commerce is notable.

Responses of Kenneth A. Cook, President of Environmental Working Group to Follow Up Questions from "Toxic Chemicals Safety Act of 2010," July 29th, 2010 hearing:

1. Industry witnesses have expressed concern that, if this bill passes, it will drive innovative manufacturing outside of the U.S. and kill high-paying American manufacturing jobs. Do you have any concerns that the global environment could suffer if we force this type of manufacturing to countries with less robust or nonexistent environmental controls?

For decades, America has been an international leader in market innovation, job creation and environmental health and safety. Through reforming the Toxic Substances Control Act, the United States can regain its leadership safeguarding the health of children and advancing the protection of the global environment while maintaining a robust chemical industry.

The global environment will not suffer from stronger U.S. chemical safety laws. In fact, as more testing and sharing of information on chemical safety comes to light more countries will find it easier to protect their populations and environment.

Currently the United States has nearly nonexistent controls on chemicals coming to the market. Ever since the Fifth Circuit Court of Appeals in New Orleans overturned EPA's proposed regulation of asbestos in 1991, TSCA has effectively been a broken and failed law because the "unreasonable risk of injury to health or the environment" is too high of a standard to effectively assess chemicals for safety. In the 34 years since TSCA was signed into law more than 20,000 chemicals have come on the market joining the 62,000 chemicals that were considered safe and grandfathered in under TSCA. Of those more than 80,000 chemicals EPA has only required testing on approximately 200 chemicals, and only regulated 5 chemicals.

Many companies that would be regulated by a reformed TSCA are multinational companies and are already required to comply with the European Union's Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) program, which has extensive safety testing reporting requirements. By reforming TSCA, Congress will ensure that Americans are protected from harmful chemicals and drive innovation in green chemistry and safer chemical alternatives. Because the Toxic Chemicals Safety Act would require chemicals to be assessed for safety before coming to market, the companies must meet the safety standard no matter where they are manufactured. That could actually lead to improved manufacturing processes at plants because any chemicals to be sold in the U.S. must meet the requirements of the law.

2. While H.R. 5820 does not regulate pharmaceuticals directly, it does directly regulate many of the active ingredients in those drugs that make them effective. If it is determined that this bill would significantly restrict access to life saving or life improving drugs, would your position change?

A meaningful safety standard requirement for industrial chemicals under TSCA would not restrict access to pharmaceuticals. Under the Federal Food, Drug and Cosmetic Act (21 USC § 355-356) as amended, drugs are already extensively tested for safety and efficacy for people before ever reaching the market. Also, H.R. 5820 does not change any jurisdictional boundaries. EPA will maintain the authority to regulate only the uses that fall under the agency's jurisdiction.

Under current pharmaceutical law, it is not enough for a drug to be effective, it has to be safe as well. We have seen numerous occasions of FDA asking companies to take pharmaceuticals off the market because of health risks. In October 2010, for example, Abbott Laboratories took the drug Meridia off the market because a trial suggested that patients taking the weight loss medication experienced more heart attacks and strokes than those taking a placebo. The director of the Office of New Drugs in the FDA's Center for Drug Evaluation and Research (CDER) said FDA made the request because the risks far outweighed the modest weight loss benefits (FDA News Release). The drug posed too significant a risk to stay on the market. Industrial chemicals should also be proven safe before they are sold, and EPA should be able to take chemicals off the market if chemicals are not safe.

Under H.R. 5820, the safety standard – "a reasonable certainty of no harm" – will not restrict access to the active ingredients in pharmaceuticals because those pharmaceuticals are subject to robust testing by the FDA and the EPA will not have authority to regulate chemical uses that fall under another agency.

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## References

FDA News Release. "Abbott Laboratories agrees to withdraw its obesity drug Meridia" O 8, 2010 <a href="http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm228812.ht">http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm228812.ht</a> [Accessed November 8, 2010]

Responses of Kenneth A. Cook, President of Environmental Working Group to follow up questions regarding "Toxic Chemicals Safety Act of 2010," July 29th, 2010 hearing:

- One issue that arose during the hearing was the question of how reforming TSCA
  might affect efforts to reduce the incidence of cancer in the U.S. A number of chemicals
  have been identified by the National Toxicology Program (NTP) and/or the
  International Agency for Research on Cancer as known human carcinogens. For many
  of these chemicals, exposure is widespread within the United States.
  - a. What authority should EPA have under a revised TSCA to address the threats posed by known human carcinogens where there is evidence or widespread exposure? How should TSCA be modified to better address the risks posed by these chemicals?

We agree that a revised Toxic Substances Control Act should address chemicals classified as "known human carcinogens" by various authoritative scientific bodies. The President's Cancer Panel underscored the health risks associated with toxic chemicals when it declared that the number of cancers induced by toxic chemicals is "grossly underestimated" and warned that Americans face "grievous harm" from largely unregulated chemicals that contaminate air, water and food (President's Cancer Panel 2010).

However, Americans are not only exposed to cancer-causing chemicals. Everyday, we are also exposed to chemicals linked to birth defects, hormone disruption, and organ and brain impairment. H.R. 5820 in its current draft effectively deals with all industrial chemicals including, but not limited to, those that are "known human carcinogens." This authority is critical given that a growing body of research has demonstrated that the fetus is exposed to a wide range of toxic chemicals during vulnerable development periods.

In 2005, an EWG commissioned biomonitoring study found more than 200 synthetic chemicals in the umbilical cord blood of 10 newborns. Last year, in tests of 10 more cord blood samples we found bisphenol A (BPA) and perchlorate along with numerous other chemicals. BPA is a synthetic estrogen that is an endocrine disruptor and reproductive toxin. BPA has been linked to cancer while perchlorate targets the thyroid and can negatively impact brain development. EWG's 2010 study also found polybrominated diphenyl ethers (PBDEs), which are flame retardants found on many electronics and furniture, in umbilical cord blood. These PBDEs are developmental neurotoxins. We also found mercury, lead, and the common perfluronated chemicals: PFOA (Teflon) and PFOS (Scotchguard) which have been tied to birth defects, infertility and cancer. Neither PFOA or PFOS are listed as known carcinogens under IARC or the NTP.

While a reformed TSCA must deal with known carcinogens, effective legislation must also regulate neuro- and reproductive toxins, endocrine disruptors, and other chemicals that cause dangerous health effects. It must also focus on protecting the most vulnerable among us, especially children. We strongly support the proposed safety standard of

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"reasonable certainty of no harm," as reflected in Section 6 of H.R. 5820. A safety standard that protects children and their developing bodies will be strong enough to protect all of us. We also urge the committee to ensure that that industrial chemicals that are found in human umbilical cord blood be the top priority for EPA under an overhauled TSCA.

# b. Do you think the changes to TSCA proposed in H.R. 5280 are sufficient, go too far, or do not go far enough? Please explain.

EWG commends you and your staff for the tremendous work on this legislation. If H.R. 5280 passed today, the Toxic Chemicals Safety Act of 2010 would be light years ahead of where TSCA currently is -a broken law that allows chemicals to stream onto the market with little or no safety testing.

We strongly support the legislation's risk-based approach to regulation and assessment and the "reasonably certainty of no harm" safety standard replacing TSCA's futile "unreasonable risk of significant injury to health or the environment," which proved too weak to ban asbestos. This standard, which EPA already utilizes under the Food Quality Protection Act of 1996, would require EPA to consider aggregate exposures to chemicals. We're also supportive of the change made from the discussion draft requiring existing and new chemicals to meet the safety standard.

A critical component of a successfully reformed TSCA is a robust minimum data set and we support the data set laid out in Section 4 of the legislation as well as tiered testing and data sharing, which will reduce costs and animal testing.

Many of the companies that would be regulated under a revised TSCA are already participating in the European Union's Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) scheme. In an effort to reduce costs, animal testing and the time taken to gather data we'd like to see clear requirements that industry share chemical dossiers and data prepared for REACH, EPA's voluntary High Production Volume program, internal uses, EPA's TOXCAST and other high-throughput screening batteries as well as data from other government agencies and programs including the FDA, NIEHS and the Centers for Disease Control and Prevention's (CDC) National Children's Study.

With more 80,000 chemicals on EPA's TSCA inventory it is vital to establish a robust prioritization system. We support the placing of the 19 chemicals listed in Section 6 on the priority list. In fact EWG has conducted research on many of these chemicals including BPA, perchlorate, phthalates and formaldehyde.

One of our main concerns, however, is that biomonitoring is not the primary factor of the prioritization process. As already detailed, EWG has biomonitored twenty samples of umbilical cord blood. In the past decade we have biomonitored approximately 200 people including those twenty cord blood samples. We commissioned these studies

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because we believe that much of the public support for toxic chemicals policy – more than 111,000 signed EWG's petition to reform TSCA – is driven by concern for chemicals' effect on human health, especially children's health. Many other scientific agencies, including the CDC have confirmed these results through additional biomonitioring studies.

The Kid-Safe Chemicals Act of 2008 would have required chemicals found in human umbilical cord blood to be phased out unless rigorous testing showed them to be safe. While detection of a chemical in umbilical cord blood does not prove that it will cause harm, it's our view that industrial chemicals that cross the placenta to contaminate a developing fetus must be placed at the top of EPA's priority list.

We also support the reporting requirements in Section 8 of the legislation. Chemical identity, use, manufacturer and relevant health and safety studies are critical for transparency and accountability. We feel that this data should be updated every year so that regulators, first responders and the public would have the most up to date information.

For too long the chemical industry has hidden behind overbroad confidential business information (CBI) protections. EWG has found that industry made CBI claims for the identities of 13,596 chemicals since TSCA was passed in 1976. The Toxic Chemicals Safety Act of 2010 contains a crucial improvement by eliminating CBI protection for chemical identity and ensuring identity and health and safety data would be publicly available. We also support the requirement that manufacturers must justify confidentiality. All these provisions would end the spurious confidentiality claims that have undermined TSCA.

We also support the expanded oversight authority of EPA that will allow them to conduct inspections and issue subpoenas to facilities as well as allowing EPA to issue orders for more testing. We are pleased to see this legislation engage on the issues surrounding fenceline communities, but would like to see the "hot spot" list and action plan strengthened to impose penalties if EPA, a state or locality does not fully implement an action plan or meet the reduction targets.

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