Good afternoon
My name is Dr. Sarah Janssen and I am speaking here on behalf of the Natural Resources Defense Council. I am a physician and reproductive biologist by training.

First, I want to applaud the Bureau for the proposed standard and your efficiency in getting this standard out to the public for review. I know this has been a tremendous amount of work for you and your staff and I want to thank you for your dedication to the issue.

Second, I want to provide some perspective on the public health benefits of the new TB117 flammability standard. While TB 117-2012 doesn’t directly address the use of flame retardant chemicals, it will have a significant and positive impact on public health because the new standard will eliminate the need for their use. In part because of their uses in furniture, flame retardants are polluting our bodies and harming human health.

U.S. house dust and, California house dust in particular, has been found to be highly contaminated with flame retardant chemicals. Flame retardants are found in house dust because they leach from the products they are used in. As a result of inhaling or ingesting this dust Californians carry in their bodies some of the highest levels found anywhere in the world.

Because infants and toddlers spend most of their time close to the ground where dust settles and because it is normal for young children to put their hands into their mouths at any opportunity, it isn’t surprising that toddlers have been found to have some of the highest levels of exposure, some three times the levels that are found in their mothers.

Infants and children are uniquely vulnerable to chemical exposures because of the tremendous amount of growth they undergo at a rapid rate. Children are also vulnerable because on
a pound for pound basis they ingest more food and liquids than an adult, and because their detoxification systems are not yet mature. These factors all combine to result in relatively higher exposures and vulnerability to toxic chemicals.

As a physician and scientist and most importantly, mother of a young child, I am quite concerned that this exposure to flame retardants is harming our health.

There is shockingly little information available on the toxicity of most of these chemicals. Most of the laboratory animal studies done on flame retardants have been focused on the group of flame retardants, PBDEs. These chemicals have been shown to disrupt thyroid hormone, and since this hormone is so important for development of the brain, it’s not surprising that PBDES have been shown to cause damage to the developing brain resulting in hyperactivity and memory problems. A recent study in animals has linked toxic flame retardants to a type of autism. Animal exposure to PBDEs is also found to cause reproductive harm such as lower sperm count and small testes, and cancer. These impacts have been published in peer-reviewed journals.

Troubling to me is that many of the outcomes once described in animals are now being found in studies of human populations. Recent studies have found women with higher levels of PBDEs in their blood take longer to get pregnant and have smaller babies. Children exposed in the womb have a lower IQ and attention problems. Other studies have linked flame retardants to male infertility, male birth defects, and early puberty in girls.

Although the PBDEs have been or are being phased out of use, exposures continue and TB 117 has resulted in the use of other toxic chemicals as replacements. One example where one toxic flame retardant has been replaced by another is the use of chlorinated Tris.
Chlorinated Tris or TDCPP was banned as a flame retardant from children’s pajamas in the 1970s because it caused an unacceptably high number of cancerous tumors. However, it was not banned from use in other products and is used as a replacement for PBDEs in furniture.

I had the foam in my couch tested and it contains Tris. Just this past fall, California placed Tris on the Prop 65 list. Soon my couch could require a Prop 65 label.

What will the next replacement in furniture foam be? We are already seeing Firemaster 550 in foam and now in house dust, sediments, air, marine environments and wildlife. I expect next, we will find it in people.

I can’t buy a new couch and have any assurance that the chemicals in it are any safer than the Tris that is in my couch now. I cringe every time I or anyone in my family sits down on it. As an educated consumer, it is infuriating that even I cannot avoid exposure to toxic chemicals in my home.

I am heartened that the proposed furniture flammability standard will eliminate the need for the use of toxic chemicals in furniture. I look forward to the day that I can buy a non toxic, fire-safe, couch.

I want to close by thanking you for holding this hearing today. NRDC supports the proposed standard and we urge you to begin the rulemaking process as soon as possible.