A year and a half ago, I found myself in a position that has caused so many people to rethink the world around them: impending parenthood. One of the many changes I decided to make in advance of welcoming our little bundle of joy was to procure a couch without flame retardants. Flame retardants have been linked to cancer, male and female infertility, autism, obesity, and attention deficit and decreases in IQ. Given the litany of research linking these chemicals to any number of ailments, I thought finding a couch that didn't include them—particularly in affluent and environmentally conscious West LA—would be relatively simple. I was wrong.

The story of how flame retardants came to be so widely used in furniture is a surprisingly captivating one, which is probably why the Chicago Tribune won so many awards for its excellent investigative journalism series Playing with Fire, or why HBO produced Toxic Hot Seat, an interesting documentary on the subject. In the 1970's, public safety officials set forth on a laudable quest to decrease fatalities from house fires. When they approached tobacco companies about developing self-extinguishing cigarettes to curtail fires, big tobacco balked. Instead, the tobacco companies started funneling millions of dollars into efforts to promote the use of flame retardant chemicals in in home furnishings as an alternative fire safety measure. It worked, and in 1975 California became the leader in fire safety when it enacted the obscure Technical Bulletin 117 (TB 117).

TB 117 haunted me as I searched for a flame retardant free couch. The few I could find online either cost over $5,000 or were accompanied by ominous messages about how the manufacturer would not, under any circumstances, ship its products to California.

TB 117 requires foam to withstand an open flame for 12 seconds without combusting. To do this, manufacturers pumped the foam used in couch cushions full of a cocktail of flame retardant chemicals. California's rule became the de facto national standard as companies began selling the TB 117 couches nationwide rather than maintaining a California-specific stock. As a result, the Center for Disease Control's major biomonitoring study has found

flame retardants in "nearly all participants," having identified them in 97% of adult samples; concentrations in Californians are particularly high.

Over time, reports on the health impacts of flame retardants led people to question the utility of using large amounts of these chemicals in furniture. Did fatalities decrease because of flame retardant-treated furniture, or because of decreased smoking rates, increased use of smoke detectors, and the advent of self-extinguishing cigarettes? Tests emerged demonstrating that flame retardants did not improve fire safety. The flame retardants could delay the foam from igniting, but the upholstery fabric and wood included in couches were still flammable.

Not everyone agreed that flame retardants were unnecessary and harmful. The $7.0 billion a year flame retardant industry defended TB 117. In a rare corporate lobbying effort to *support* more stringent regulations, flame retardant manufacturers spent at least $23 million to defeat five bills authored primarily by California State Senator Mark Leno to modify TB 117. Much of that was spent on the creation of "Astroturf" (i.e., fake grassroots) organizations with names like "Citizens for Fire Safety." When the Chicago Tribune series pulled the curtain back on flame retardants, Leno and environmental health groups were finally able to pass legislation amending TB 117. Governor Brown signed the bill into law, and in 2013 the captivatingly named Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation released a revised standard, TB 117-2013. The new standard, which became voluntary January 1, 2014, and mandatory January 1, 2015, does not require flame retardants to pass the test. It has since withstood a legal challenge by chemical manufacturer Chemtura, which a California Superior Court judge dismissed in September 2014.

Such legislative change was welcomed by environmental groups, but it took a while for consumers to see results. In the beginning of 2014, my search for a couch was still fruitless. Most sales people seemed genuinely baffled by my request for a flame retardant free couch, and mildly concerned by my enthusiasm for the obscure TB 117-2013. Too impatient to wait for new stock at mainstream stores, and too cheap to shell out $5,000, I patronized the aptly named foamorder.com, which shipped me flame retardant-free replacement foam for the cushions of my existing couch for under $250 in less than two weeks.

A year and a half later and in the market for a loveseat, I am happy to report that the long arm of TB 117-2013 has now reached many mainstream retailers. NRDC has a good summary of where to find flame retardant free furniture.

Given the longevity of most couches, the legacy of TB 117 will most likely be felt for

decades. It has been nearly ten years since flame retardants were first detected in that most compelling of environmental symbols, polar bears (although furniture is not the only source of these chemicals), and human and environmental exposure is likely to continue. My attempts at responsible disposal of my old cushions were comically ineffective. The customer service representative at LADWP seemed unperturbed by the toxicological studies on flame retardants, and instructed me to throw them out with my normal trash.