The Lautenberg Act

Over 96 percent of all goods manufactured involve chemistry. Yet it's widely believed that the EPA's current inventory of about 86,000 chemicals is incorrect and out-of-date. In June 2016, The Frank R. Lautenberg Chemical Safety for the 21st Century Act (LCSA) replaced the Toxic Substance Controls Act (TSCA) of 1976. As a result, the EPA has been given deadlines to make changes in the way they oversee chemicals. One of their first tasks—create an updated list of all chemicals manufactured in the U.S. or imported since 1978.

The many revisions to the TSCA will also affect specific manufacturing sectors, such as companies that create products to clean electronic circuit boards. Congruently, one of the most significant deadlines has already been met by the EPA—identifying the ten most dangerous chemicals, i.e., high-priority. Of the ten chemicals defined, six of them can be found in some cleaners used during the electronic assembly process, and three of them distinctly stand out.

n-propyl bromide
CAS #106-94-5
Alternative names - nPB, bromopropane, 1-propyl bromide, 1-bromopropane

See All-Spec's guide to nPB-free products.

Trichloroethylene
CAS #79-01-6
Alternative names - TCE, 1,1,2-trichloroethene, 1,1-dichloro-2-chloroethylene, 1-chloro-2, 2-dichloroethylene, acetylene trichloride, trethylene

Perchloroethylene
CAS #127-18-4
Alternative names - PERC, perchloroethene, tetrachloroethylene, PCE

Many manufacturers have already created viable replacements for formulas containing various hazardous chemicals. Below you'll find some of the steps you may want to take before additional changes are introduced and more EPA deadlines approach. Manufacturers should ask these important questions.

- Which of your existing products and chemicals should receive attention?
- Are any of your products at risk for chemical deselection?
- Will you need to reformulate any products?
- What will you do if the chemical becomes restricted?
- Do you have a plan in place for handling possible disruptions to your business?
- Are you prepared to defend the confidentiality of your product's chemistry/formula if it's identified as a potential "high-priority" chemical?

The EPA has a number of deadlines to address and actionable items to carry out. Here's the timeline.

- Within 180 days from enactment, start risk evaluations for the first 10 high-priority chemicals (pulled from EPA's existing Work Plan Chemicals list).
- Within 1 year, establish the process for identifying additional high- and low-priority chemicals.

- Within 1 year, chemical manufacturers must report all chemicals being currently produced or processed to the EPA so they can attain an accurate accounting of chemicals currently in commerce.
- Within 3.5 years, evaluations must be underway for at least 20 high-priority chemicals.
- Within 3 years, risk evaluations must be completed; possible 6-month extension.

Summary of changes

Below you'll find a summary of some of the important action items assigned to the EPA.

- Review all chemicals in commerce based on risk
- Subject all new chemicals to EPA review before release
- Base risk evaluations only on human health and environmental considerations
- Review at-risk populations, i.e., infants, pregnant women and the elderly

The EPA must create a process based on risk to identify high- and low-priority chemicals and their hazards in relationship to:

- Uses
- Typical exposures to people including vulnerable groups
- Environment
- Proximity to drinking water sources

If the EPA believes more data would help them determine the safety of a chemical, manufacturers will be required to make it easier for them to do so.

> **Previously, the EPA had to show that a chemical didn't meet the safety standard before it could require more tests.*