



## Green Chemistry Position Statement

### WHY GREEN CHEMISTRY IS NEEDED? WHY IS CAL/EPA LEADING THIS INITIATIVE?

Green Chemistry is the best way to reduce exposure to toxic chemicals. It is a preemptive strategy to stop toxic substances before they contaminate the environment and our bodies. It is a marked departure from the past, where society managed industrial wastes by dumping or burning. Rather than merely manage the risks of these wastes, Green Chemistry seeks to eliminate them. Green Chemistry is a new way to deal with chemicals before they become hazards, rather than mopping up the mess.

Green Chemistry is the design of products that do not generate hazardous substances. Green Chemistry focuses on improving the building blocks of manufacturing – the molecules, the feed stocks, and the catalysts used to make things – so products can be engineered to be safer, not persist in the environment and be easily reused. Fewer hazardous substances mean healthier air quality, a safer workplace and cleaner drinking water. Green Chemistry changes the nature of a chemical product so it doesn't threaten human health or the environment. The goal of Green Chemistry is to make things "benign by design."

A comprehensive new approach is needed because existing laws and regulations focus only on what we throw out as a society - our waste. However, every week, headlines reveal consumer products laced with toxic substances. People assume that the government tests products for chemical safety, but that's not always true. There are thousands of chemicals in use; however, we know little about how they affect people or the environment or how we are exposed to them. There are information gaps that prevent the free market from working properly to stimulate innovation of safer, healthier substitutes. Consumers are not the only ones who lack this information. Businesses all along the supply chain also lack this basic information which could lower their costs and liability from goods that contain toxic substances. Meanwhile, each day, the United States produces or imports 42 billion pounds of chemicals – equivalent to 623,000 gasoline tanker trucks stretching from San Francisco to Washington, DC and back. And as more nations adhere to protective new measures developed in other industrial nations, products deemed unsafe for sale overseas are increasingly being sold in the United States.

Global markets are changing and increasing the demand for toxic-free products. Nations that now require the sale of products without toxic ingredients include large, desirable markets in India and the European Union. California has the opportunity to lead the nation in creating the safer substitutes that these global markets will be demanding in the coming decades, while it ensures that California does not become the dumping ground for toxic products prohibited elsewhere.

Chemistry has fueled remarkable medical, agricultural and industrial advances over the past century that has improved every facet of life. Green Chemistry is an opportunity to spur the next industrial revolution, building on nature's design principles, human ingenuity and creativity. The chemical industry estimates it contributes \$635 billion to the nation's GDP. Green Chemistry is an opportunity to make a safer and more efficient world with less waste. California can lead with a Green Chemistry program to harness the power of the market, unleash innovation to increase competitiveness and build better products.