



Clean Water—An American Success Story

(NAPSA)—Water is essential to life. And clean drinking water is essential to good health.

But though water covers 70 percent of the Earth's surface, less than 1 percent is fresh water available for drinking.

Making clean, safe drinking water available to people in all parts of the United States has been one of the great scientific and technical achievements of the past century.

It has literally added years to our lives. According to the Centers for Disease Control, the average American now lives 30 years longer than his or her great-grandparents because of the availability of clean water. Early in the 20th century, before drinking water was widely treated, thousands of American children died before the age of 5 and it was rare for anyone to live beyond age 50 because of waterborne diseases like cholera, dysentery, hepatitis and typhoid fever.

Little was known about these diseases until a pioneering chemist at the Massachusetts Institute of Technology, Ellen Swallow Richards, conducted the first comprehensive study of drinking water in that state in 1887. Her work led to the establishment of the first state water-quality standards in the nation and construction of the first modern sewage treatment plants.

This was followed in the early 1900s with a major breakthrough that has literally saved millions of lives in the United States and throughout the world. A chemist and an engineer working for the Maryland health department in Baltimore discovered that by adding small amounts of chlorine to drinking water, you could rid it of the bacteria, viruses and other microorganisms that carry most



waterborne diseases.

Thanks to these and other scientists and engineers, Americans today enjoy one of the safest water supplies in the world. Each day, we collectively drink more than 1 billion glasses of clean, safe tap water. One hundred seventy thousand public water systems treat billions of gallons of drinking water and distribute it through more than 880,000 miles of piping to homes, farms and businesses throughout the country. A great engineering achievement, and an even greater public health achievement.

Unfortunately, not every country is as lucky. According to the World Health Organization, more than a billion people around the world still lack access to safe drinking water and approximately 3.5 million people—mostly children—die each year from water-related diseases.

In response to this global challenge, chemical companies are partnering with humanitarian organizations and local governments to introduce clean water systems where they are most desperately needed. To learn more about how chemistry is essential to clean water and health, visit the American Chemistry Council at www.americanchemistry.com.