# DRINKING WATER CHLORINATION

A Chemistry to Help Meet the Post-2015 UN Sustainable Development Goals

# ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING

Safe drinking water is fundamental to healthy living and well-being.
Chlorinated drinking water helps people avoid the debilitating effects of waterborne illnesses such as cholera and typhoid fever.

# ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

Affordable, reliable chlorine-based disinfectants are a key factor in making safe drinking water and sanitation services available globally.



# ACHIEVE GENDER EQUALITY AND EMPOWER WOMEN AND GIRLS

In much of the developing world, women and girls procure the family's water, often walking long distances over many hours per week. Water infrastructure that delivers safe, chlorinated drinking water to households helps enable women and girls to focus on education and employment.



### **END POVERTY**

Chlorinated drinking water can help end poverty by reducing waterborne illness, thereby improving health so that people can better work toward their education and employment goals.



#### PROMOTE FULL AND PRODUCTIVE EMPLOYMENT

Healthy workers are productive workers, and good health starts with safe drinking water.
Chlorinating drinking water is time-tested, affordable and scalable to meet a wide variety of circumstances.



# **WHY CHLORINE?**



## **PROVEN**

Chlorine-based disinfectants have been used for over a century to help provide safe drinking water. They eliminate a wide range of disease-causing bacteria, viruses and parasites.



#### **AFFORDABLE**

Drinking water chlorination is generally more affordable than other water treatment methods – making it a viable option for many developing nations.



### **LONG-LASTING**

Of all the common drinking water disinfectants, only those that are chlorine-based provide a "residual" level of disinfectant that keeps on working long after it is added to water. The "chlorine residual" helps prevent microbial regrowth in treated water that is stored or conveyed to consumers through pipes.



## **MEASURABLE**

People can better trust chlorinated drinking water because they have the ability to measure chlorine's presence in water. The "chlorine residual" is a science-based, verifiable indicator of water quality that can help demonstrate the safety of drinking water—a condition to achieving several of the Post-2015 Sustainable Development Goals.

# SCALABLE

Drinking water chlorination is a scalable technology that can be applied in a range of circumstances, from the household level to the community level, to a regional state-of-the-art water treatment facility.

