

Dow's products and technology are all around—driving improvement in agriculture and water treatment, to better building products for our homes and leading edge electronic technologies. Through "Discover Dow" we hope you will learn more about the way Dow touches and enhances lives throughout the world.

Discover DOW

Clean Water for Haiti



Dow is working with *Pure Water for the World* to bring clean drinking water to people in Haiti following the devastating January 2010 earthquake. Using two ultrafiltration water systems donated by *Dow Water & Process Solutions*, Mobile Water Treatment Systems in Haiti will be able to turn contaminated water into about 10,000 to 20,000 gallons of drinkable water each day!

The World's Facing a Water Crisis

- One in eight people today — one billion total worldwide — do not have access to clean drinking water
- The earth is made up of 70% water, but only 2.5% is suitable for drinking
- Over half of the world's freshwater is found in just nine countries
- More than 3.5 million people die every year from water-related diseases
- Scientists predict that by 2015, two-thirds of the world will be living in water scarce areas

Cleaning Up the World's Dirty Water

Thirsty for a glass of water? Turn on the kitchen faucet. Want to water the lawn? Turn on the hose. Need to wash your hands? Just turn on the bathroom faucet. Getting clean water is something many of us simply expect when we turn on a faucet. But for many others around the world, access to clean water is not that simple. For many, finding clean water can require long walks and hard work to capture the water.

The world's facing a water crisis and *Dow Water & Process Solutions* (DWPS) is helping out! By using Dow technologies, clean water supplies are being brought to water scarce areas around the world.

DOW™ Ultrafiltration (UF) is a water purification process that uses membrane technology to turn undrinkable water into drinkable water. How does it work? First it starts with pressurized **DOW™ UF** modules that look like long, white pipes capped off at both ends. Each module contains thousands of small, hollow fibers. As pressure builds in the module, water is forced through pores in the fibers that are just 0.03 micron thick — about 3,000 times *smaller* than an average human hair! This separates the water molecules from all particulate matter, bacteria and most viruses and colloids — making the end-result water clean and safe to drink.

In addition, DWPS makes high-quality **DOW™ FILMTEC™** reverse osmosis and nanofiltration elements for a wide variety of industrial, municipal, commercial and home drinking water applications. These elements help ensure the availability of safer, cleaner and good-tasting tap water that meets both Environmental Protection Agency and Safe Drinking Water Act standards. Dow also produces

DOWEX™ ion exchange resins — a popular water purification process because it enables high water recovery with a low volume of waste. When you think ion exchange, think sponge. Ion exchange resins soak up contaminants from water and other liquids — acting like chemical sponges that take out the harmful elements and leave clean drinking water behind. Ion exchange resins are used in a variety of applications from chemical processing to pharmaceuticals, mining, and food and beverage processing.

