

Every Drop Counts – Local Water Conservation Solutions



Water conservation is often a local issue. Therefore, Pfizer colleagues in a variety of water-stressed areas are implementing their unique solutions to the infrastructure issues that are specific to them.

REDUCING THE WATER FOOTPRINT IN LA JOLLA

Pfizer La Jolla is in a very arid region. Dry conditions, ongoing drought in the Colorado River basin, low reservoir levels, and a reduced snow pack have created many challenges for Pfizer La Jolla and the surrounding community.

Since 2006 the Pfizer La Jolla site has been using 100% recycled water for all irrigation and installed low-flow water fixtures in several areas. These measures reduced the Pfizer La Jolla campus' reliance on potable water by 25%. In 2009 the site installed water conserving shower and faucet heads to further reduce reliance on potable water.

Recycled (or reclaimed) water is approved for several uses in the City of San Diego, including irrigation. It can also be approved for use in cooling towers and, if treated further, other non-contact uses on site.

Our La Jolla site continues to explore opportunities to reduce its water footprint in order to alleviate business continuity concerns and show leadership in environmental sustainability. A feasibility study was recently completed to explore on-site treatment options that would allow for much broader use of recycled water and potentially achieve significant reductions in potable water use.

INNOVATE TO IRRIGATE IN ALGETE, SPAIN

Knowing that Madrid, Spain has a limited water supply, colleagues challenged themselves to think about wastewater more as a product than a waste. Looking for innovative ways to recycle this valuable resource, Pfizer's biotech Algete facility set a goal of zero wastewater discharge to the Jarama River.

Working with local authorities, Algete teams determined that the treated water discharged from the wastewater treatment plant could be used for other purposes. Colleagues then made the business case to reuse wastewater for onsite landscape irrigation.

The reuse permit issued now allows for more than 4,000 cubic meters of wastewater to be used annually for irrigation, which equals a 6% decrease in water consumption.

Pfizer was the first industry in Spain to receive a permit to reuse wastewater for irrigation under the New Royal Decree (1620/2007) paving the way for others in the area. There is also potential to expand the reuse of wastewater in off-site landscaping irrigation, fire protection systems and cooling towers.

REPLENISHING WELLS IN TOLUCA

Mexico's water wells are severely depleted due to overuse. Colleagues at Pfizer's site in Toluca saw the opportunity to replenish these wells. They did this by modifying the design of the water basin in a new parking lot they were building.

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Every Drop Counts – Local Water Conservation Solutions (cont.)

The original design aimed to prevent floods included a sealed basin to catch rain water and later pump it into the municipal sewer to empty the basin. The modified design of the water basin was “perforated” so that rain water could be infiltrated to the layer of earth directly below the topsoil to reload the water wells.

All permits and local regulation requirements were verified and they continue to regularly monitor water quality.

A GARDEN GROWS IN SENEGAL

The Pfizer Global Manufacturing site in Dakar is located in an area of economic water scarcity, where water savings projects are very important. At tropical sites like this, the heating, venting and air conditioning (HVAC) system generates a large volume of condensation that typically goes to the sewer.

The Dakar team had the idea to re-use that condensation liquid to water the site’s garden. However, the project’s budget was very low. The answer – design with materials the site already had but no longer used.

The condensation liquid is collected by a piping network and stored in an underground tank re-purposed from the site’s used equipment. The collected water is then pumped to the garden with a solar pump. The project cost just \$1,203 to implement.

The team forecasts an annual savings of 540 cubic meters of water and \$906 (5% of Dakar’s annual system water usage and budget). The effort was recognized by the Energy & Climate Change program and can be easily replicated by other sites in water-scarce regions.

THANE, INDIA WATER CONSERVATION

The Global Operations team at the Thane site has commissioned a facility to store and treat water that will irrigate the site’s widely spaced landscape. The site generates approximately 50 cubic meters outflow of water daily that is treated through the state-of-the-art effluent treatment plant. The EHS and Engineering, Maintenance, and Utilities (EMU) colleagues saw an opportunity to store the treated water and reuse it, instead of fresh water, to water the plants. The project has conserved 45 cubic meters of fresh water daily and has saved \$17,000 per year.

SUMMARY

Though the individual challenges may be unique, the one thing all of these Pfizer sites have in common is colleagues working together to find innovative ways to conserve every drop of water they can in their local environments.