

WATER REDUCTION STRATEGY DEVELOPED TO AID WATER SCARCITY IN REGION

CLIENT | LOCATION

Global Pharmaceutical Manufacturer, Cape Town

SECTOR

Pharmaceutical manufacturing

PROJECT BRIEF

EECO₂ was tasked with developing a strategy to reduce water usage at the busy Cape Town site. As the water supply was at a critical level in the area, heading into summertime with a low winter rainfall, the situation was looking dire. While limits were imposed, they were not being adhered to and so the condition was worsening.

METHODOLOGY

Using best practiced expertise, the EECO₂ team investigated opportunities to find any leaks and fix them, reduce any unnecessary usage of water, reuse and recycle if possible. Looking at the current water usage in production and what procedures were in place, the team worked on what process could be put into place to reduce the use of water on a daily basis and how much of this could be reused. The EECO₂ team also looked at how to communicate the situation to the workforce and instil the urgency of the situation to reduce consumption and waste.

SOLUTION

Working with an extremely interactive and engaged team who contributed immensely throughout the week, allowed the event to run smoothly with great end results.

Creating a Water Strategy for the site, with key focus areas of water recovery, cooling systems, RO plants, rain water & domestic, which included:

- Water metering – adding to and modifying existing metering, including the creation of a KPI strategy to create alert limits
- Raising awareness of the situation daily
- New procedures in place for leak reporting
- Replace water-cooled, with air-cooled chillers
- Recycling water where possible from waste streams i.e. reuse final CIP rinse for first rinse of next cycle
- Recover HVAC condensate for re-use
- Rainwater harvesting
- Sharing best practice water reduction with other sites

In the end, the team developed 24 Projects on the final project list, with a number of 'just-do-it' projects, which will deliver immediate savings if implemented.

RESULTS



11,147 m³ (47%)

Water savings potential identified from projects (per year)

3,652 m³ (16%)

Water savings identified from rain water harvesting (per year)

R 562k (63%)

Water cost savings identified (per year)

FOR FURTHER INFO

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