

# Closing the Loop at Shell

## Water Recirculation Co-Funding Case Study

Cleaner Production 

### Project Overview

#### PARTNER

Shell Newport Terminal

#### OBJECTIVE

To continually reuse water used in weekly fire pump testing at the Newport Terminal

#### HOW THE SAVINGS WERE ACHIEVED

The fire pump test water recirculation system directs the water used by the pumps into a storage tank for further reuse by the pumps, closing the loop on drinking water use

#### TECHNOLOGY UTILISED

Recirculation system

#### WATER VOLUME SAVING

4.2 million litres of drinking water per year

#### OTHER SAVINGS OR IMPROVEMENTS

A reduction in stormwater discharge

#### TOTAL PROJECT COST

\$80,000

#### PROJECT FUNDING

\$40,000 from City West Water

#### PROJECT PAYBACK

- 20 years without City West Water funding
- 10 years with City West Water funding

#### PROJECT COMPLETED

March 2008.



The Shell logo is one of the world's most recognisable images. This global energy organisation employs over 2600 people in Australia, having established operations here in 1901. One-third of Australia's petroleum requirements are met by Shell.

The Shell Newport Terminal is Shell's major fuel distribution centre in Victoria. Around 2.2 billion litres of petroleum products flow through this terminal to Victoria and the New South Wales Riverina districts each year. The core products distributed by the Newport Terminal are diesel, solvents, base oils, fuel oil, unleaded petrol and aviation fuel.

Shell Newport Terminal is required to undergo weekly fire pump testing due to its status as a major hazard facility. The water used in these fire pump tests was being directed into the stormwater drain and washed away.

A water audit initiated by Shell found that 25 per cent of the site's water was being used



### City West Water Ltd

247 – 251 St Albans Road  
Locked Bag 350  
Sunshine Vic 3020 Australia

E enquiries@citywestwater.com.au  
W www.citywestwater.com.au  
ABN 70 066 902 467

# Closing the Loop at Shell

## Water Recirculation Co-Funding Case Study

Cleaner Production 

during these mandatory fire pump tests. This represented around 80kL per week, and made the fire pumps a prime candidate for water saving change.

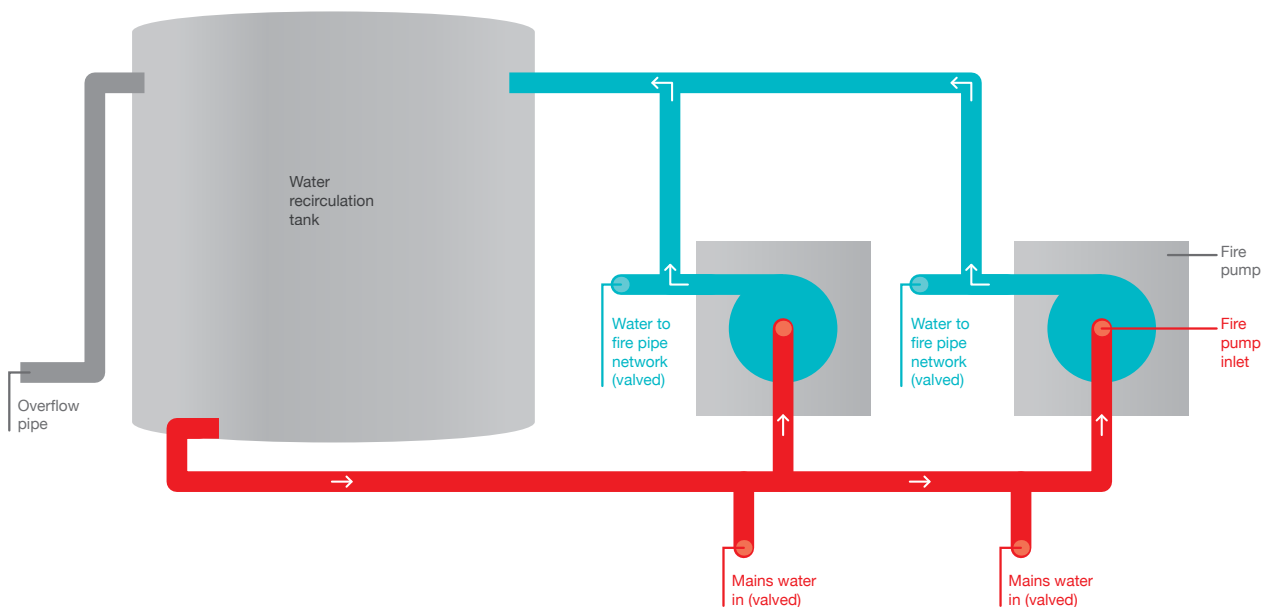
A project was introduced to continually reuse water used by the fire pumps during the weekly tests. A water recirculation tank was installed to capture and recirculate the water used to test the pump operation. As the water is not being exposed to any other part of the plant, it remains contaminant free, ensuring the performance of the pumps and the health and safety of maintenance and fire fighting workers is not compromised.

Now established and fully operational, the fire pump test water recirculation system boasts no ongoing drinking water requirements, and the water savings from the project that have been realised will continue into the future.

Shell is active in communicating with its local community, and frequently meets with community leaders to keep them across its environmental performance. The project has been promoted to the community liaison committee and has received positive feedback. EPA Victoria has also endorsed the project, as environmental discharges have been reduced.

The project's appeal can be attributed to the simplicity of its design. It is effective in reducing the use of drinking water, saving 4.2 million litres per year, while still enabling Shell to meet its workplace safety requirements. The project has enabled Shell to exceed its own waterMAP target of reducing water use by 10 per cent at its Newport Terminal.

Shell and City West Water are continuing to work together to implement a range of other initiatives to save water as identified in Shell's waterMAP.



## Contact

**Shell**  
**Deborah Pose**  
**HSSE Coordinator**  
 Burleigh Street  
 Newport VIC 3023  
 T (03) 9392 1294  
 E [deborah.pose@shell.com](mailto:deborah.pose@shell.com)

**City West Water**  
**Audra Liubinas**  
**Coordinator Cleaner Production Solutions**  
 247–251 St Albans Road  
 Sunshine VIC 3020  
 T (03) 9313 8703  
 E [aliubinas@citywestwater.com.au](mailto:aliubinas@citywestwater.com.au)