

# Implementing Cleaner Production to Improve Trade Waste Discharge Quality

### What is Cleaner Production?

Cleaner production is a proactive environmental strategy that focuses on the prevention of waste generation. Opportunities are likely to exist for commercial and industrial businesses to implement cleaner production techniques to ensure efficiency for inputs such as water, energy and chemicals is maximised and generation of wastewater and solid waste is minimised.

The more efficient and 'lean' you are with your onsite processes, the greater the impact this will have on minimising raw inputs and costs associated with disposal of waste. This information sheet focuses on the benefits incurred and also the common opportunities to improve Trade Waste discharge quality through cleaner production techniques.

## Why Should I Implement Cleaner Production?

#### Reduce Operating Costs by potentially minimising:

- Internal drain blockages
- Pre-treatment & chemical costs
- Wastewater pumping costs
- Trade Waste charges

#### Increase Productivity by reducing:

- Raw material losses per production unit
- Product Losses that could be otherwise sold

#### Increase Environmental Performance:

- Cleaner wastewater discharges
- Cleaner discharges to the environment
- Increasing ability for water recycling

#### Social Benefits through:

- Increased Corporate Profile
- Increased Staff Morale
- Reduced WHS risks

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# How do I implement Cleaner Production to improve my Trade Waste Discharge quality?

Some more common opportunities that can benefit your organisation are outlined below. When considering implementing cleaner production, follow the logical diagram of most preferable to least preferable options outlined in **figure 2**.

**Dry cleaning** – put down the hose and pickup up the squeegee and put the solid waste in a bin or identify opportunities for solid recycling or reuse

Limit hosing waste to drains – save this for after dry cleaning, scraping and foaming

Empty drain baskets in floor drains regularly – these act as tea bags when excess waste is left, increasing wastewater pollutants

**Pre-strainers & Drain baskets** – to reduce suspended solids contributing to wastewater minimise strainer hole size to maximise suspended solid retention

Minimise spills – identify and rectify issues with equipment that lead to regular spills

## Most Preferable Avoid Reduce Reuse Recycle Recover Treat Dispose Least Preferable

Figure 2: Hierarchy for Cleaner Production

Identify concentrates for segregation – identifying the contaminants from different waste streams can highlight opportunities for more cost effective disposal such as through the SA Water Co-digestion scheme or creating a saleable bi-product

**Review chemicals** – cleaning and pre-treatment chemicals contribute to pollutant loadings. Consider alternative chemical options that may exist to minimise chemical addition

Maximise production scheduling efficiency – scheduling like products simultaneously can reduce the cleaning requirement and therefore minimise waste from washing

**Review solid waste disposal contract** – investigate opportunities for reduced price for segregation? Maximise recycling opportunities







Reduce use of hot water - review necessity and reduce in line with cleaning and food safety

**Benchmark data** – record data weekly and promote on staff notice boards. For example, kg of Suspended Solids in wastewater per kg product produced and kL water used per kg product produced

**Promote Staff Awareness** – ensure production staff are aware of the implications of their practices

*Opportunities for Cleaner Production exist and can be cost effective on many occasions for industrial and commercial businesses. There are environmental, financial and regulatory drivers for cleaner production on your site.* 



Figure 3: Example of dry cleaning solid wastes reducing Trade Waste loadings

#### Where can I go for more Information?

SA Water's Business Technical Group (BTG) is available to assist commercial and industrial customers with direction and advice on improving their wastewater quality and water efficiency. For more site specific information, visit <u>our website</u> for a range of different information sheets, case studies and services that may be of assistance. If you would like to speak directly to a SA Water Technical Officer for advice or arrange a site visit, please contact the BTG on the details provided in the banner below.



