

## Trade Waste: Implementing cleaner production in the seafood processing industry

### Managing Total Dissolved Solids (TDS) levels

Managing high TDS concentrations in trade waste is often challenging for seafood processors because saltwater is commonly used. Saltwater has a TDS of approximately 35,000mg/L, which is significantly greater than the TDS acceptable for sewer networks and wastewater treatment plants. Reducing TDS as well as other loads will reduce trade waste costs and improve SA Water's ability to recycle wastewater.

TDS is easier to manage when concentrations are known. If unknown, high TDS sources can be identified by analysing trade waste monitoring data and sampling different waste streams. Some other potential sources for concentrated TDS could be from waste streams such as treatment and/or cleaning chemical solutions, backwashing solutions from water softeners, cooling tower and boiler discharges, brining or marinating solutions from production processes and trade waste originating from source water high in TDS, such as some groundwater.



### Potential opportunities to reduce TDS concentrations in trade waste

Once the sources of high TDS are known you can consider different management options. It's also beneficial to gain an understanding of the volumes of concentrated TDS waste streams.

- Using less saltwater to transport fish from docks to the factory will minimise the volume of saltwater arriving onsite. Packing the fish in tighter or filling up containers with less saltwater will assist with TDS management
- If you are dealing with low volumes, hauling these waste streams to hauled waste stations or back to fishing vessels to dispose of at sea

# Fact sheet

- Substituting saltwater with freshwater where possible
- Substituting products such as cleaning and treatment chemicals with products that won't contribute as significantly to TDS
- Buffering or mixing highly concentrated TDS waste streams with low TDS waste streams in buffer tanks will also help lower the concentration of TDS trade waste discharging to sewer.

## What are the potential opportunities to reduce other trade waste concentrations?

Opportunities often exist within the seafood processing industry to reduce suspended solids (SS), biochemical oxygen demand (BOD) and fats, oils and grease (FOG's). Some suggestions are outlined below;

- Ensure fish are gutted and gilled as clean as possible before arriving to your factory
- Implement dry cleaning strategies ensuring solid waste is entering solid waste bins
- Ensure primary screens are installed on all drains
- Ensure permanent screening to 2mm, where practical, and ensure screens are cleaned regularly
- Educate staff on the implications of trade waste and dry cleaning strategies.

## Where can I go for more Information?

SA Water's Business Technical Support is available to assist commercial and industrial customers with direction and advice on improving wastewater quality and water efficiency. For more site specific information, visit [our website](#) for a range of different information sheets, case studies and services. If you would like to speak directly to a SA Water Technical Officer for advice or to arrange a site visit, please contact us on the details provided in the footer below.