Boilers

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Trade waste discharges from companies with boilers can harm the sewerage system. Proper management practices at each site are needed. This guideline outlines the areas of concern and available technologies for the control of these trade wastes.

Key trade waste quality requirements

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Generally accepted level</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Between 6-12 units</td>
</tr>
<tr>
<td>Temperature</td>
<td>≤38 degrees C</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>≤3500 mg/L</td>
</tr>
<tr>
<td>Flow rate to sewer</td>
<td>Dependant on capacity of receiving sewer</td>
</tr>
</tbody>
</table>

Note: Discharge limits may be varied under certain circumstances for individual dischargers.

Typical pre-treatment

- Live or flash steam must never be discharged directly to sewer.
- Steam boiler or hot water boiler blowdown is cooled below 38 degrees C via a suitably sized blowdown pit or above ground cooling vessel, discharging to sewer via a gully trap. These must have enough retained water volume at ambient temperature to mix with and cool the incoming blowdown. Australian Standard AS3892 - 2001 has more information about blowdown tank design.
- Heat exchange systems fed from a flash steam vessel can reduce blowdown temperature to an acceptable level. These provide an opportunity for recycling waste heat back to the system.
- Accumulated solids captured in blowdown equipment are removed as needed for off-site disposal.
- Boiler water treatment chemicals are stored in bunds, to prevent leaks and spills from reaching the sewerage system.
- In-ground blowdown pits are covered and finished above ground level to prevent surface or stormwater entry.

More information

Mains Water Backflow Protection (AS/NZS 3500.1:2015)

Backflow Prevention Requirements - Office of the Technical Regulator

Bunding and Blind Tanks Guideline