

Multi-utility contract for Tata Steel Packaging

The Client

Our Client, Tata Steel Packaging in Trostre, South Wales, is a leading manufacturer of high performance packaging steels. With production facilities that also includes the Netherlands and Belgium they supply the can-making industry worldwide.

As part of the Tata group of companies, Tata Steel is committed to building on steel's excellent sustainability credentials through the effective use of resources: limiting energy use, lowering emissions (CO₂) and saving water consumption.



The Benefits

- Significant ongoing cost savings and environmental benefits delivered through operational efficiencies and technical optimisation
- Outsourcing the delivery of a comprehensive suite of environmental services through a single point of contact allows Tata Steel to focus on its core activity.
- Reduction in filter cake tonnage from ~12500t/yr to ~6000t/yr
- New gas fired boiler facility ensures increased energy efficiency and security of supply

The Client's Needs

Tata Steel was looking to achieve long-term savings and efficiency improvements in respect of its effluent treatment plant, boiler house and waste management activities on site.

Tata Steel wished to develop a multi-utility outsourcing strategy with an experienced utility provider who could offer operations and management within a single point of contact, allowing them to concentrate on their core activity.



The Solution

Veolia Water Industrial Outsourcing (VWIO) offered a ten year multi-utility outsourcing contract, calling upon the expertise and resources of three Veolia Environnement divisions – Veolia Water, Veolia Energy and Veolia Environmental Services. The tailor made integrated solution includes:

- Management and optimisation of the existing effluent treatment plant and upgrade of instrumentation and control to a modern SCADA telemetry system.
- Design, build, own, operate and maintain a new boiler house facility
- Site waste management services

The contract provision has evolved to include continuous improvement as a key part, this has allowed:

- The installation of a new treatment plant to improve the efficiency of Chrome VI reduction to Chrome III, this improves the final discharge quality and provides significant cost reductions
- Optimisation of the dosing regime to improve the hydraulics of the effluent treatment.
- The introduction of waste recycling

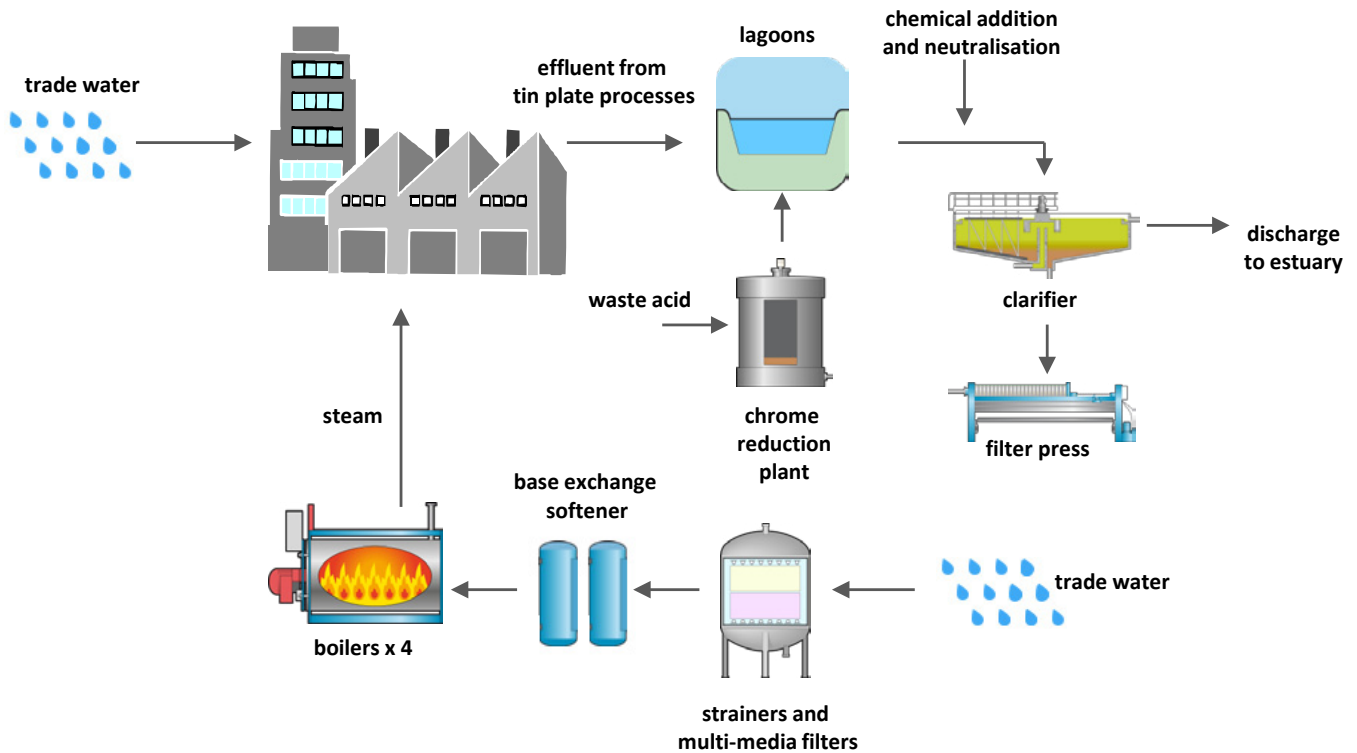
Process Description

Effluent Treatment Plant

An open channel brings effluent from the main production plant to one of three lagoons from which oil is skimmed. Water from the settled lagoons is pumped to neutralisation cells for precipitation of the metals in one of two clarifiers before being released to the outfall. Sludge from the clarifiers is pumped to filter presses and the cake then sent to landfill.

Boiler Water

Trade water passes through multi-media filters and a base-exchange softener before feeding the boiler plant to raise steam for the steel packaging manufacture.



Results

Within the partnership Veolia Water Industrial Outsourcing and Tata Steel continue to deliver sustainable environmental and cost saving benefits to the Trostre site through targeted investment and optimisation of the effluent treatment facility and operation of the gas fired boiler facility.