Mobile Water Services assists INEOS ChlorVinyls with Cooling Tower maintenance, UK

Chemicals | Case Study

The Client

INEOS ChlorVinyls is a major manufacturer of industrial chlor-alkali chemicals. A global leader in chlorine derivatives and Europe's largest PVC manufacturer, the company's products include a number of familiar trademarks such as CERECLOR™ and NORVINYL™.

Located in the heart of the North West UK's chemical industry, the company's Runcorn Site manufactures a full range of chlor-alkali chemicals including chlorine, sodium hypochlorite, caustic soda and hydrochloric acid as well as vinyl chloride and chlorinated paraffins. INEOS ChlorVinyls has a strong commitment to the highest standards of safety and environmental performance.

Key Facts

- INEOS ChlorVinyls’ manufacturing process depends on cooling system
- Cooling system had to remain operational during replacement of cooling towers
- INEOS ChlorVinyls’ industrial customers depend on supplies

The Client’s Needs

INEOS ChlorVinyls’ wooden cooling towers were to be replaced but shutting down the cooling system would result in lost production, so the towers were to be replaced one at a time. In order to complete the on-line change 50m³/hr of cooling water, contaminated with demolition debris, flowing into the sump of the off-line tower had to be handled and treated. Commissioning Manager Eddie Sloan considered his options: discharge the water to drain or recover it back to the cooling system. The first option would overload the drains, and replacing the lost water with mains water would be expensive and would exceed the capacity of the cooling system make-up water treatment plant. The second option needed a pumping and filtration system to remove the demolition debris.

The Solution

Mobile Water Services could provide a temporary plant consisting of pumps and two stages of filtration: coarse strainers followed by bag filters. The skid mounted plant was designed, built and delivered to site within only a few days. The bespoke system remained there for two months until the tower replacement had been completed. Removing the debris from the water and retaining it, and the cooling water conditioning chemicals that it contained, was not only a more environmentally friendly solution but also allowed continued operation of the cooling system at full duty. The cost saving of disposing of the contaminated water and replacing it with mains, Mobile Water Services saved the client £30,000.

The Benefits

- Process Capacity: a continuous supply of 50m³/hr
- Rapid Response: Onsite within days of inquiry
- Environmental Impact: Prevented discharge of contaminated water
- To Budget: project resulted in £30,000 cost saving to the client

For further information:
Veolia Water Technologies – Mobile Water Services
Whittle Road, Meir, Stoke on Trent, Staffordshire
Tel: +44 (0) 203 567 7548 / +44 (0) 203 567 7517
www.mobilewaterservices.com