

## Industrial wastewater



### Complete and Effective Solutions

- 2 m<sup>3</sup>/day to several thousand m<sup>3</sup>/h

Decontamination of industrial sewage is a challenge faced every day by managers of treatment plants: balancing regulatory obligations in terms of discharge standards and economic constraints with operation requires extensive experience and know-how. Veolia Water Solutions & Technologies helps all industries in all sectors from diagnosis through to the selection of appropriate Hydrex™ solutions.

The Hydrex range covers chemical conditioners specifically adapted to meet the requirements of the different treatment plant processes.

#### Hydrex™ 6000 SERIES

- Inorganic, organic coagulants and inorganic/organic mixtures
- Coagulants of plant origin (tannins for example)
- Anionic and cationic powder flocculants
- Anionic and cationic emulsion flocculants
- Flocculants in the form of microbeads and dispersions
- Heavy metal insolubilizers
- Antifoams

#### Hydrex™ 9000 SERIES

- Anti-H<sub>2</sub>S specific products
- Various odor control products

### Global Solutions

Hinged around the daily support of our regional businesses and rapid interventions from dedicated industrial wastewater teams, Veolia Water Solutions & Technologies offers:

- Industrial pilots: sizing of installations and improvement analysis through audits and laboratory tests
- Technical assistance: technical monitoring developed according to our experience and in collaboration with the client, constant improvement programs, operating advice to improve reliability and respect discharge standards.
- Supply of Hydrex™ products: by people with in-depth knowledge of chemical products and their usage.





## A complete offer for treating industrial wastewater

- >>> Understanding the water and sludge systems through audits and studies
- >>> Providing the Hydrex™ chemical reagents adapted to treatment of industrial pollution
- >>> Improving/Restoring the performance of treatment plants
- >>> Improving a plant's reliability by providing operational advice and monitoring
- >>> Putting in place functional improvements to reduce operating costs

## An example of industrial partnership

Treatment of fume scrubbing effluents from a household refuse incinerator

- Several problems were initially noted including: poor coagulation and flocculation inducing losses of SS with the discharge exceeding standards on heavy metals (cadmium, lead, mercury)
- Replacing the  $\text{FeCl}_3$  coagulant by a Hydrex™ organic coagulant has resulted in a coagulation better adapted to the effluent, an improvement in the control of SS and a reduction in sludge volumes – all at a lower cost than the previous solution.
- Setting up a Hydrex™ insolubilizer specifically for the reduction of mercury and cadmium has resulted in a discharge significantly within the legislation limits.
- Monthly technical monitoring ensures that any changes in operational conditions are detected early

### Access to all the expertise of the Veolia Environment group

In addition to Veolia Water Solutions & Technologies' expertise, clients benefit from the Veolia Group's research and development activities such as those conducted at the Maisons-Lafitte Water Research Center. Clients also benefit from synergies between Veolia Group companies Veolia Water, Veolia Energy and Veolia Environmental Services.

