



## INDUSTRIAL WASTEWATER

# Where, why, what and how to analyze

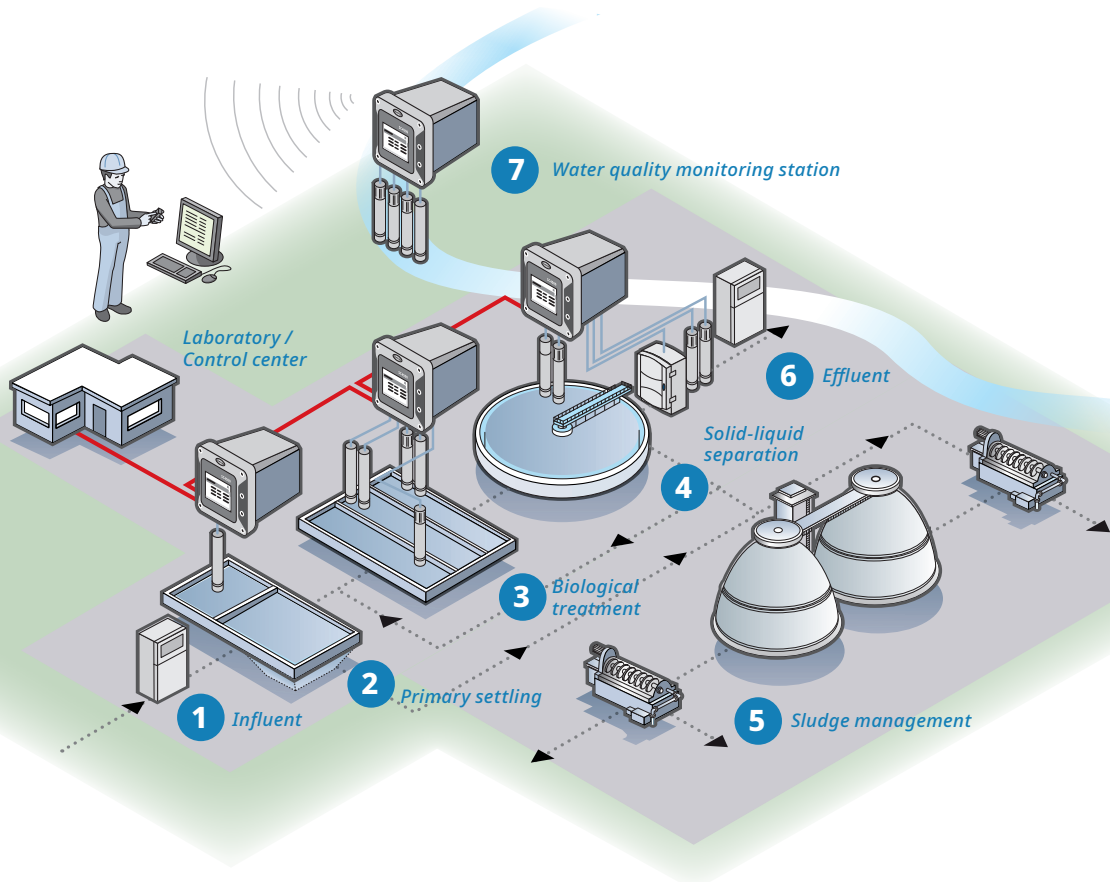
### You need to be sure:

- That your treatment process works efficiently and cost-effectively
- That your plant is capable of handling unexpected load peaks coming from production
- That your effluent complies to regulatory requirements

This means that the analytics processes and products you rely on to make informed decisions must be accurate, reliable and informative all the time.

The Hach® analytics portfolio is designed to give you confidence. From a simple, dedicated meter to on-line measurement or wastewater treatment optimization our solutions are based on years of innovation and a desire to provide the simplest way to results you can trust. Our products, application support and local service help you achieve:

- Maximized uptime of equipment
- Analytics solutions that give a real return on your investment
- Savings on chemicals and energy costs



Where	Why	What*	How
1 Influent	Early indicator for unusual contaminants potentially harmful for the biological treatment	Conductivity, pH value	▶●
	Basic parameter used for load calculations	Flow	●
	Determination of the organic carbon load	BOD, COD, SAC, TOC	▶●
	Qualified sample for lab analysis	Sampler	▶
2 Primary settling	Sedimentation control, sludge pump control (to digester)	Sludge level	●
3 Biological treatment	Monitoring and controlling the efficiency of the biological treatment	Ammonium, Nitrate, Dissolved Oxygen	▶●
	Monitoring and controlling ortho-phosphate providing input for phosphate elimination control	Phosphate, Ortho	▶●
	Ensuring optimal sludge age for nutrient elimination	Suspended solids	▶●
	Ensuring optimal conditions for nitrification and denitrification	Organic acids	▶
	Ensure optimal conditions for chemical treatment/dosing	pH value	▶●
	Ensuring optimal conditions for nitrification and denitrification in anaerob reactors	Acid capacity	▶
4 Final sedimentation	Sedimentation control, sludge pump control (return to biological treatment or waste to digester)	Suspended solids	▶●
		Sludge level	●
5 Sludge management	Optimal thickening and dewatering performance with minimal polymer dosing; ensuring optimal solids/ organic load and biogas production	Suspended solids	▶●
6 Effluent	Regulatory compliance, monitor treatment process performance and ensure compliance with legal limit values	Ammonium	▶●
7 Water quality monitoring station		Conductivity	▶●
		Flow	●
		Nitrate	▶●
		Organic acids	▶
		pH value	▶●
		Phosphate, Ortho/ total	▶●
		BOD, COD, SAC, TOC	▶●
		Turbidity	▶●
Qualified sample for lab analysis		Sampler	▶

▶=Lab analysis

●=Online analysis

\* For additional parameters and solutions please contact your local Hach representative or visit our website.



World Headquarters: Loveland, Colorado USA | [hach.com](http://hach.com)

United States 800-227-4224 fax: 970-669-2932 email: [orders@hach.com](mailto:orders@hach.com)  
 Outside United States 970-669-3050 fax: 970-461-3939 email: [int@hach.com](mailto:int@hach.com)

©Hach Company, 2024. All rights reserved.

In the interest of improving and updating its equipment, Hach Company reserves the right to alter specifications to equipment at any time.

DOC030.53.10059.May24