

INDUSTRIAL WASTEWATER TREATMENT PROCUREMENT GUIDE

A STEP-BY-STEP GUIDE TO SUCCESSFUL, STRESS-FREE INDUSTRIAL WASTEWATER TREATMENT PROCUREMENT

When a leading UK manufacturer experienced problems with its wastewater treatment plant, the company bought a Trickling Filter through a municipal water contractor. The company only became aware it had wasted its money when the Trickling Filter failed to resolve the wastewater treatment problem.

What went wrong?

Put simply, the company didn't make an informed and successful buying decision because it didn't fully investigate what was needed to fix the problem. To do that, the company needed to identify and understand the root cause – or causes - of its particular problem. It didn't. Instead, the company assumed buying new kit, in this case, a Trickling Filter, would be enough to make the problem go away.

The company in this short case study, based on a true story, is not alone. It's not unusual for resources to be wasted on inappropriate wastewater treatment solutions that can't - and won't make a positive difference.

Help is at Hand

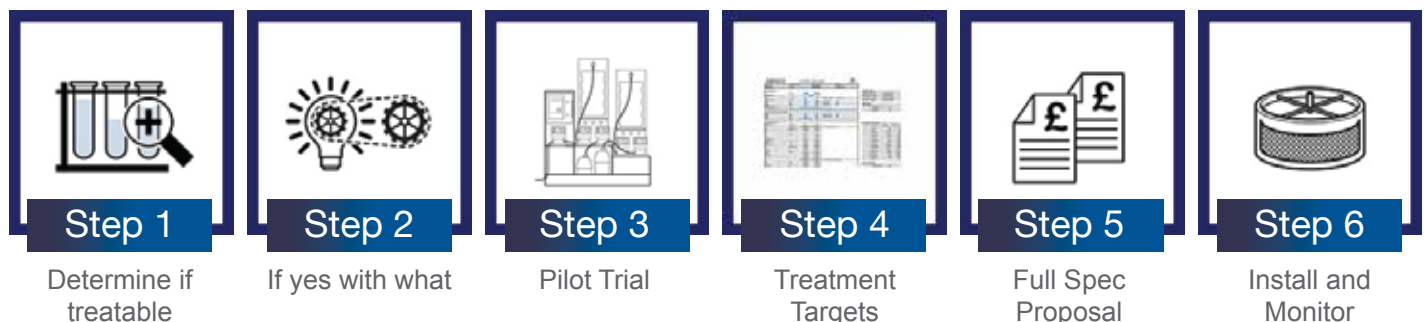
So, we got to thinking about how we could help customers take control of the procurement process and ensure this. And that's when we came up with the idea for an easy-to-use Industrial Effluent Treatment Procurement Guide.

The guide will take you through the earliest – and most important – stages of the procurement journey - from analysis, design and evaluation to identifying the people who need to be involved.

Six Steps To Success

In this guide, you'll find general advice you can use in any procurement situation. But there's one element we always use with our customers which you won't find elsewhere because our Six Steps approach is unique to 2H Water Technologies.

We designed the Six Steps in response to customer demand for an approach that would underpin, streamline and simplify the processes involved in achieving an effective effluent treatment system.



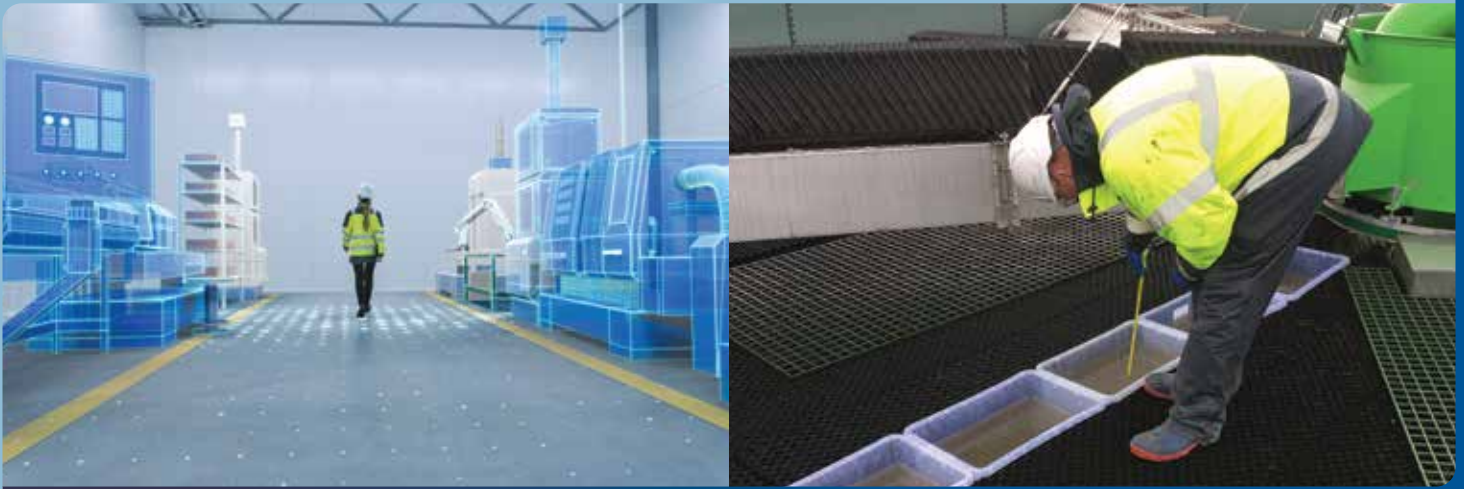
For more information: 2hwatertechnologies.co.uk
E sales@2hwatertechnologies.co.uk T 01604 742300

2H Water Technologies,
Unit 6 Prospect Court, Courteenhall Road, Blisworth, Northants NN7 3DG

 **BRENTWOOD®**

ENEXIO
2H WATER TECHNOLOGIES

THINK COMPLEX, CAPITAL INVESTMENT ENGINEERING PROJECT



Buying Industrial Effluent Treatment Isn't Easy

And, if you think it's all about buying plant and products, think again. It's a capital investment project with long-term strategic, financial and operational consequences.

Typically, you can expect the procurement process for a complex engineering solution such as industrial effluent treatment to take around two years during which you – the procurement manager and the other roles that will be involved be it Quality, Finance, Plant or Maintenance - will inevitably encounter a variety of challenges.

Where To Start

If you've been tasked with managing a procurement process that is outside your area of expertise, and looks like adding to your already heavy workload, it can be tempting to settle for the obvious. As we've seen from the brief introductory case study, that can involve "diagnosing" a problem by the most obvious operational "symptoms" and settling for the most obvious solution. An existing relationship with a supplier, or a bias for a specific treatment approach, can also seem like attractive options.

But none of these approaches will result in an effective solution.
Let's look at the reasons why.

Identifying The Cause Of The Problem

When customers approach a supplier, they know they have a problem. They may have been prompted to upgrade, or install, wastewater treatment plant by, for example, failing to meet consents.

While they're aware of something being wrong, the root cause of the problems is not always understood. So when products and plant are bought based on nothing more than experience with a particular piece of equipment or previous knowledge of supplier, it is not definite that the products and plants will address the causes of their effluent treatment problem.

Plant Treatment Walk Through

Want to get an accurate picture to help improve your treatment efficiency?

Book an on-site session with an effluent treatment expert
2hwatertechnologies.co.uk/onsitewalkthrough

 **BRENTWOOD®**

ENEXIO
2H WATER TECHNOLOGIES

EVALUATING THE WASTEWATER JOURNEY

BRENTWOOD ENEXIO Water Technologies (2H) believes that starting the procurement project with analysis and evaluation is not only best practice but the essential precursor to the detailed specification customers need to make an informed buying decision.

Because of this, we recommend our customers start every procurement project by taking a step back to analyse and evaluate what we call the “wastewater journey” which is everything that happens to their wastewater stream during treatment through to the point it reaches the final stage as discharge. The starting point is understanding how current operations are calibrated, measured and sampled, what goes in during the wastewater journey, as well as the composition and treatment of the wastewater stream.

Evaluation and analysis and best practice needn't be as complex or time-consuming as it might sound. Wastewater treatment is an engineering process based on a detailed series of standard operations plus sampling and testing procedures. Because of that plants should have a set of standard effluent treatment guidelines which outline the various processes and procedures, as well as how and when they are conducted.

By using Standard Operating Procedures (SOP), if available, as a baseline for investigation and working through each stage of the wastewater treatment process, it's possible to identify not only which components, products or plant aren't working properly but the reasons for failure or underperformance. In addition, careful analysis and evaluation will provide the information you need to make basic purchasing decisions such as whether it's time to replace a major piece of kit, such as a Trickling Filter, or just replacing components is enough to rectify the situation.

While customers can conduct the evaluation and analysis themselves, many industrial users don't have the necessary in-house resource. By using the 6 Step approach, 2H's customers can take advantage of our Design Service expertise which, in the initial stages of procurement, involves analysis and evaluation which we factor into production of a detailed specification.



For more information: 2hwatertechnologies.co.uk
E sales@2hwatertechnologies.co.uk T 01604 742300

2H Water Technologies,
Unit 6 Prospect Court, Courteenhall Road, Blisworth, Northants NN7 3DG

 **BRENTWOOD®**

ENEXIO
2H WATER TECHNOLOGIES

PLAN YOUR PROJECT

Every procurement project needs a plan. Here's what you'll need to know to map out your questions, tactics, decision points and potential moves in advance.

The Current Operational Situation

Before you start thinking about products and technologies, you need a clear understanding of, current operational performance.

- What has changed – e.g. operational demand, the type of products and plant used, logistics, or, importantly, wastewater output and consents?
- Are there elements of your current plant that are still working well?
 - And not working – i.e. what precisely do you need to replace or upgrade?
- Are Standard Operating Procedures (SOP) in place?
- And what about the plant and production processes?
- Is there anything you need to consider during the buying process?



People

A project of this complexity can't be handled effectively without input from a range of expert contributors. Accept that you can't go it alone. Be prepared to ask for expertise, advice and support from a wide range of contributors.

This is not a buying decision you can make without consulting colleagues and partners. It should be an interactive process involving consultation and regular communication with:

- People who can provide expertise, guidance and expertise.
- Senior decision makers across all areas of the business.

In our experience, your "support team" might include:

- Other plant or factory managers
- Senior wastewater treatment staff
- Quality Management Team
- Engineers
- Sustainability specialists
- Facilities managers
- On site laboratory facilities
- Wastewater treatment suppliers

Ideally, you should try to organise meetings with all stakeholders and contributors at the earliest possible point in the procurement process. After that, we recommend customers stay in regular communication with colleagues, contributors and stakeholders – and meet whenever possible.

Plant Treatment Walk Through

Want to get an accurate picture to help improve your treatment efficiency?

Book an on-site session with an effluent treatment expert
2hwatertechnologies.co.uk/onsitewalkthrough



EFFLUENT TREATMENT



The Basic Elements

You don't have to be an effluent treatment expert – that's the supplier's job! But you do need to understand the basic elements of the products and approaches to:

- Evaluate your options.
 - o determine the most effective approach that delivers the most effective effluent treatment.
 - o conduct a cost-benefit analysis.
- which will involve knowing the long-term cost implications, for example, energy use and costs; expected working lifetime, maintenance and upgrades.
 - o Review the environmental impact and any specific elements that will make the operation more sustainable
- Secure buy-in from senior decision makers, whether that's senior management, boardroom, financial directors or your direct boss.

One final point to bear in mind is that effective wastewater treatment is more than a set of products and processes. It's a living, biological eco-system that is constantly changing and so needs expert design, monitoring and maintenance.

Here To Help

2H is here – and qualified - to answer any questions and provide all the support and advice you need.

2H is the UK's leading supplier of Trickling Filter products and technology for biological wastewater treatment. We are the only supplier with the breadth and depth of expertise needed to offer customers a comprehensive, expert service – process design expertise, consultancy and support - that ensures a fuss-free, timely and successful project.

For more information: 2hwatertechnologies.co.uk
E sales@2hwatertechnologies.co.uk T 01604 742300

2H Water Technologies,
Unit 6 Prospect Court, Courteenhall Road, Blisworth, Northants NN7 3DG

 **BRENTWOOD®**

ENEXIO
2H WATER TECHNOLOGIES