



Pharmaceutical Wastewater Management

# TOC Monitoring

Case Study

HORIBA  
Process & Environmental

TOCADERO ONE  
ONLINE TOTAL ORGANIC CARBON ANALYZER

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For pharmaceutical manufacturers, wastewater management plays an important role in both environmental compliance and operational efficiency.

One of Ireland's largest pharmaceutical manufacturers recently reviewed how it monitored Total Organic Carbon across two on-site evaporator systems, with the goal of improving visibility, automating evaporator control decisions and reducing reliance on manual sampling.

## CHALLENGES

The site operates two evaporator systems to manage wastewater before it enters the wider stream.

Previously, monitoring relied on live sampling and lab analysis, creating delays between measurement and action. If TOC levels rose too high, material required further treatment before discharge.

With evaporators costly to run, continuous TOC monitoring was essential for compliance, process confidence, efficiency and cost control.

## SOLUTIONS

Two **Horiba Tocadero One** systems were supplied and supported by us, positioned side by side to enable continuous monitoring of the two separate evaporator processes.

The analysers provide sophisticated online TOC measurement, delivering near real-time visibility into wastewater conditions without the delays associated with manual grab sampling and laboratory testing.

## OUTCOME

1

### Improved process visibility and control

Operators now receive faster TOC measurement data in real time, with automated evaporator control reducing the need for manual interventions.

2

### Greater compliance confidence and reduced risk

The site can respond more quickly to elevated TOC conditions, reducing reliance on grab sampling, lab waiting times and delayed decision-making.

3

### Better operational efficiency

Improved process optimisation supports more stable evaporator operation, with potential cost savings from running the systems more efficiently.

