



GLBIOCONTROL

RAPID MICROBIAL DIAGNOSTIC

**FEEDBACK**

**DENDRIDIAG® ATP TESTS**

*Public authorities and private operators*

GL BIOCONTROL

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### WHAT ARE WSPs?

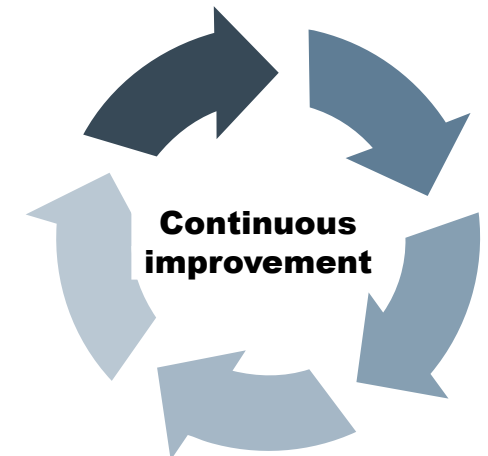
« Water Safety Plans »

The new Drinking Water Directive 2020/2184 brings a major change by introducing the **Water Safety Plans (WSP)**. Originally recommended by the **WHO**, they will now become **mandatory**.

« Proactive approach rather than reactive measures »

The WSPs are part of a continuous improvement initiative in order to:

- ✓ **Identify** hazards and control risks (risk assessment),
- ✓ **Optimise** drinking water safety and quality,
- ✓ **Continuously guarantee** high quality water.



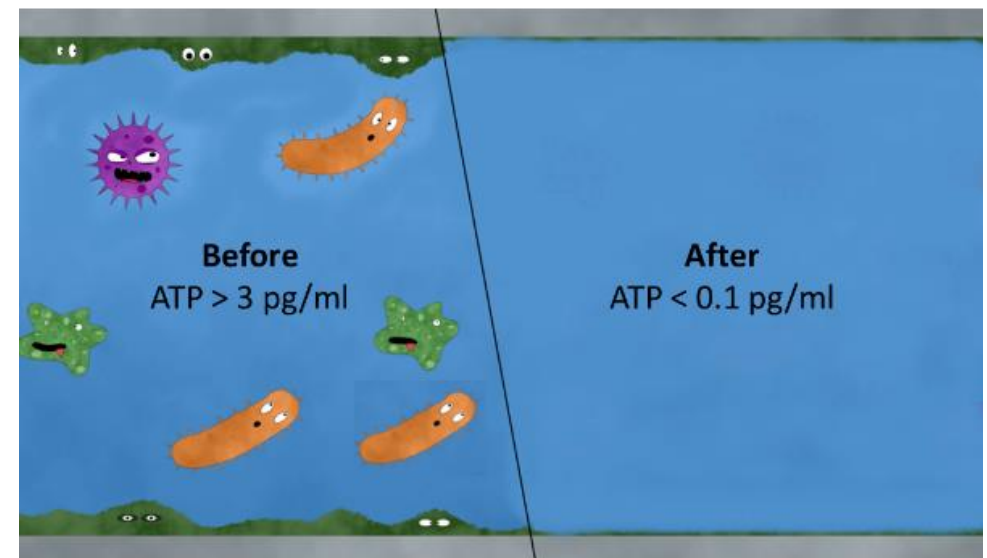
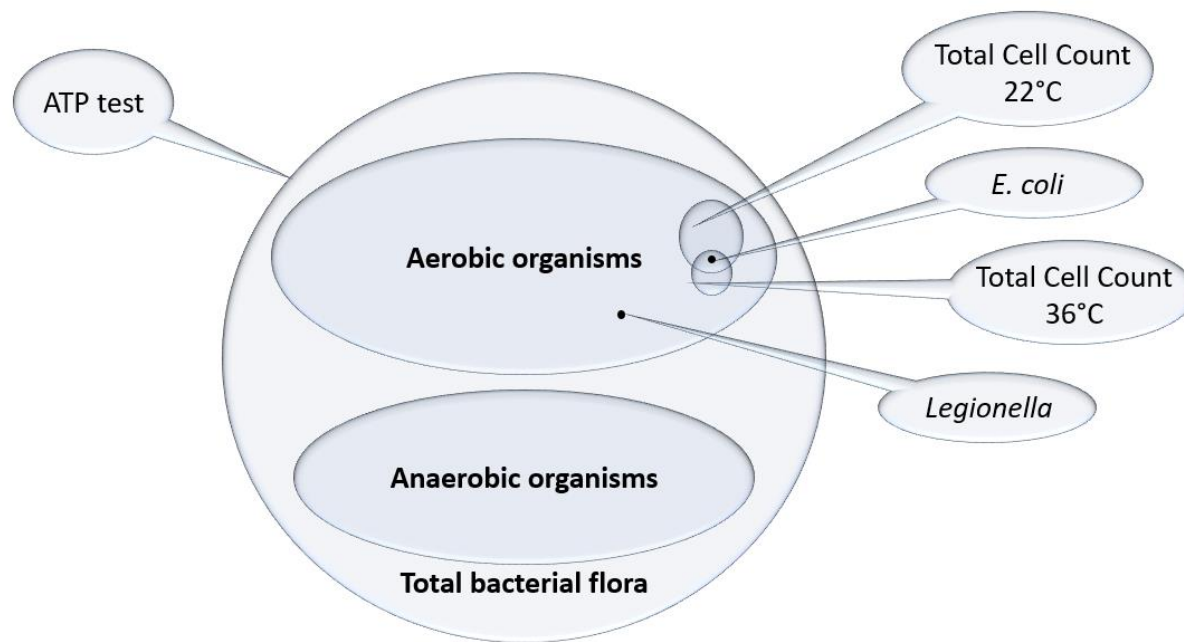
## WHAT ARE ATP TESTS?

ATP tests detect all the bacteria present in a sample. It gives the global microbiological load of the sample..

An ATP test is a **TOTAL FLORA** measurement.

<https://youtu.be/hxyUbIzCe4>

« Assess a non-specific treatment  
with a non-specific analysis »

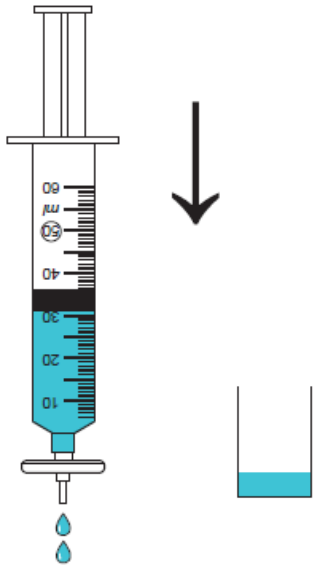




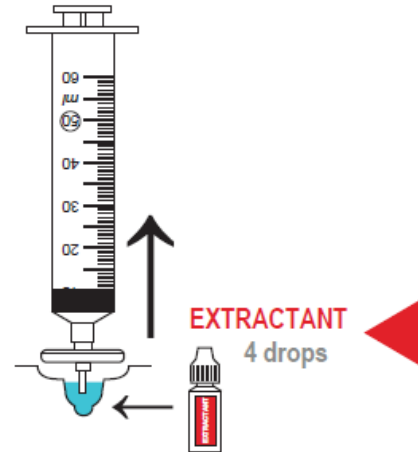
# DENDRIDIAG® ATP TEST HOW DOES IT WORK?

**AN EASY PROCEDURE DOABLE ON THE FIELD OR IN A LABORATORY IN 2 MIN**

**1.** FILTER the sample



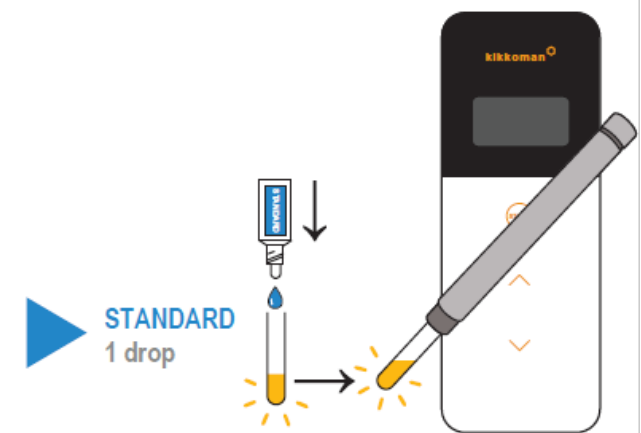
**2.** EXTRACT the ATP



**3.** QUANTIFY the ATP



**4.** VALIDATE the analysis





## MONITORING THE CLEANING OF WATER STORAGE TANKS



- Management of rinsing.
- Validate disinfection efficacy.
- Secure re-commissioning.
- Avoid costly revisits.



Team Suez for « Eau de Bordeaux métropole »





### LAYING OF NEW PIPES OR RE-COMMISSIONING AFTER WORK



*Re-commissioning after damage  
Team Suez Eau France Nouvelle Aquitaine*

- **Validate** the disinfection and rinsing process.
  - **Secure** re-commissioning.
  - **Avoid** costly revisits.
- Water recall impossible in case of non-conformity.





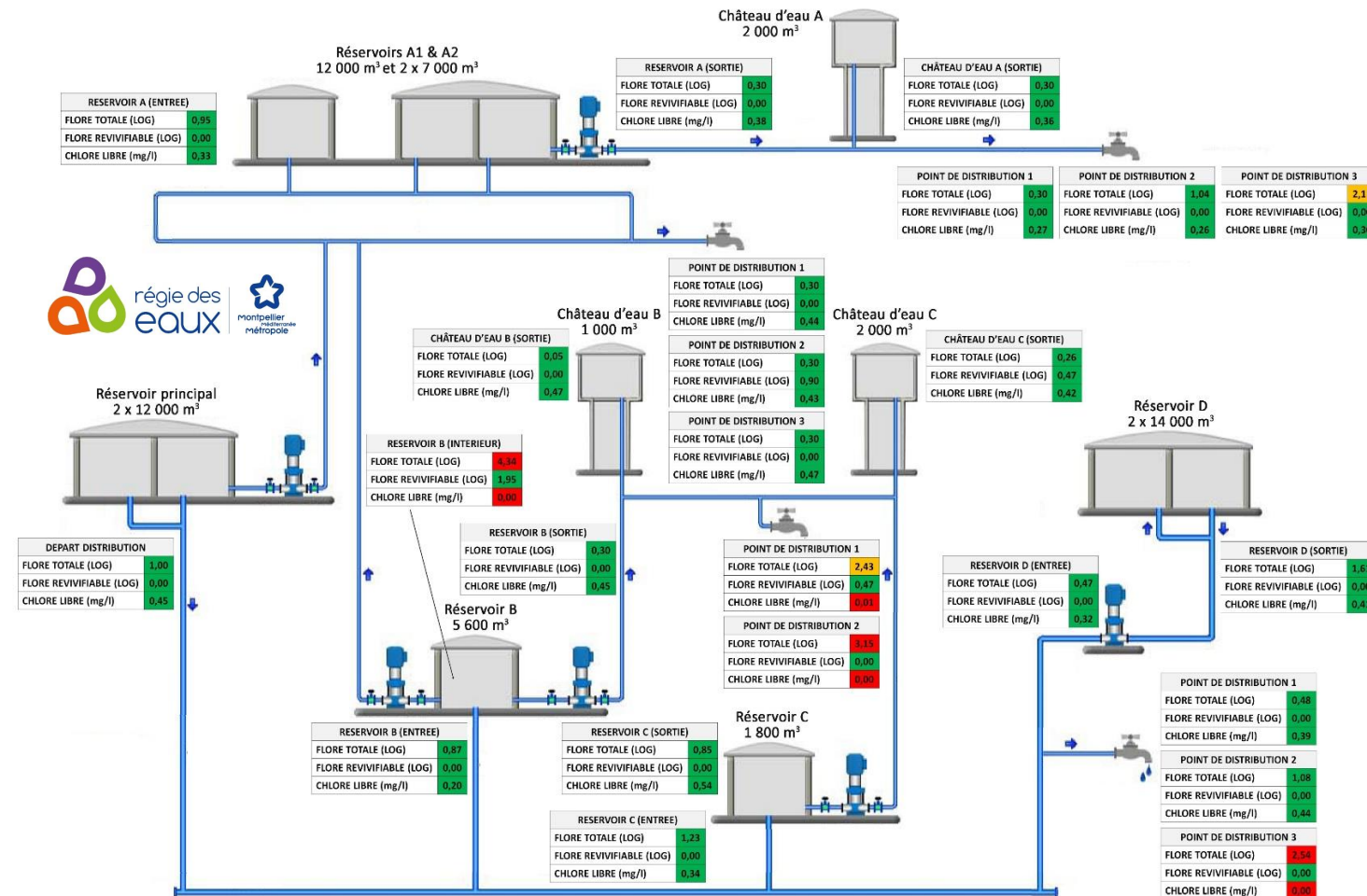
### CRISIS MANAGEMENT (FLOODING, SAMPLING WITHOUT PURGE...)



- **Ensure optimal efficacy** of the intervention and the disinfection process.
- Implement **reinforced and continuous biomonitoring**.
- Re-commission your installations **in emergency situations safely**.
- **Reassure health authorities**, the client and local councils.



## MAPPING OF A WATER DISTRIBUTION SYSTEM



- Network inventory.
- Create an improvement program (WSPs)
- Identify sampling points.
- Highlight malfunctions.
- Install chlorination systems, chicanes...
- Manage flushing and contact time.





### EVALUATE THE PERFORMANCE OF THE WATER PRODUCTION SYSTEM



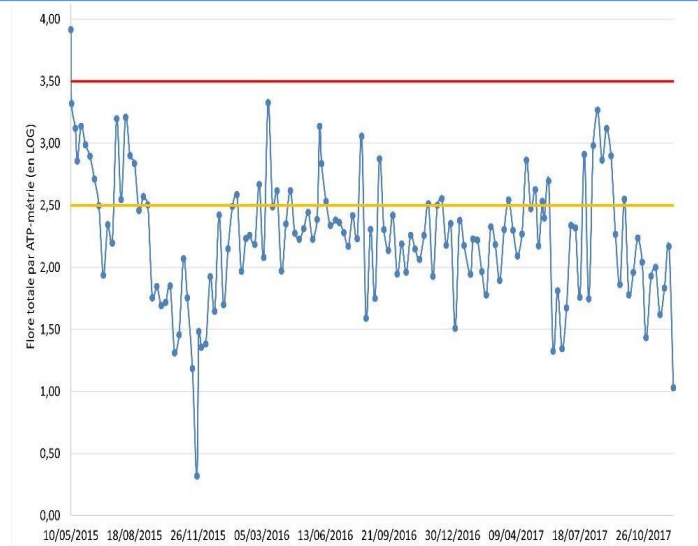
- **Evaluate** water treatment system efficiency.
- **Manage the contact time** and the disinfectant concentration.
- Schedule **sand filters cleaning**.
- **Monitor the biomass evolution** in the catchment area (after flood, drought...).



## AN EVENT DIARY



- Observe the impact of water **temperature fluctuations**, after storms, or during of **population movement**.
- Assess **strategy change** in water treatment.
- Investigate a **chlorine-free water** program.
- Manage **contact time**, flushing...

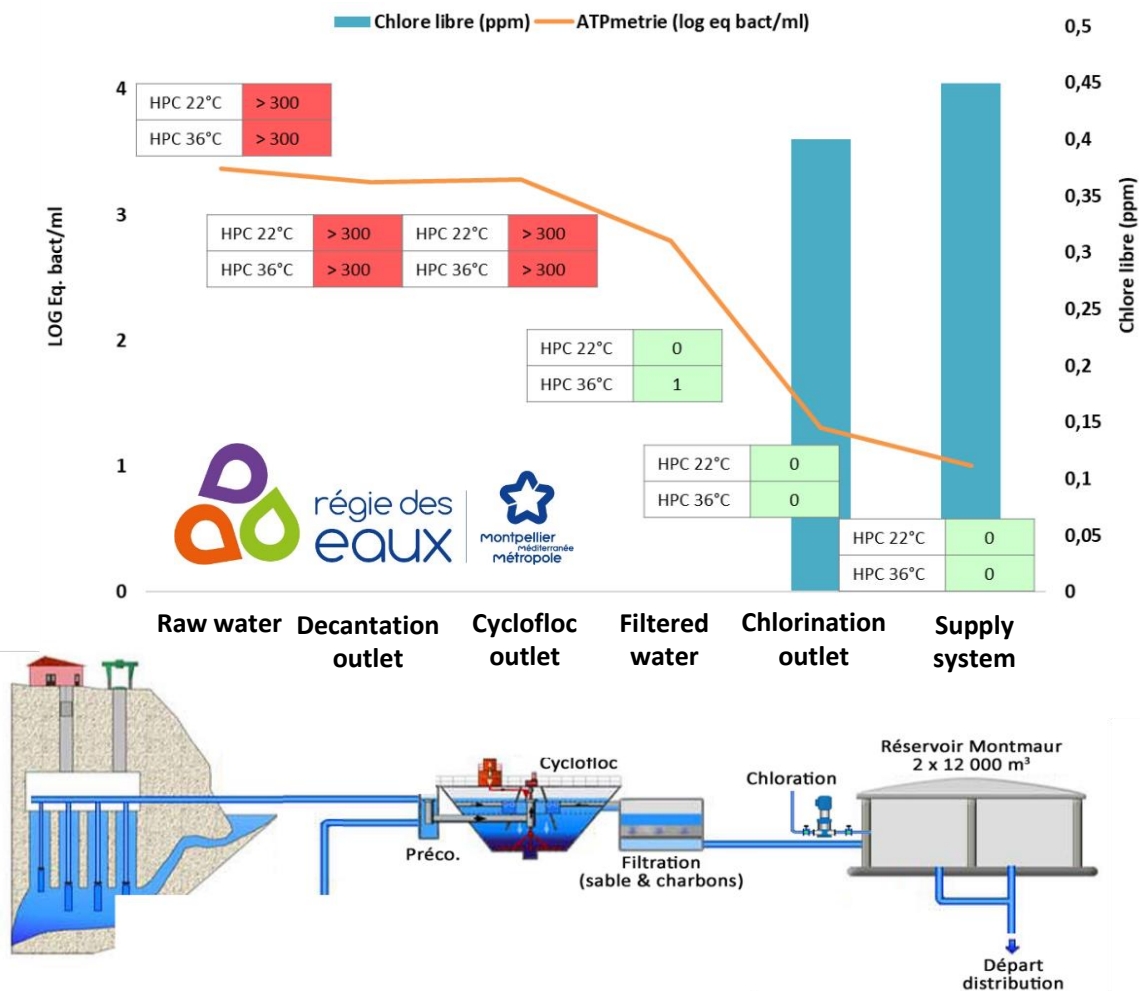




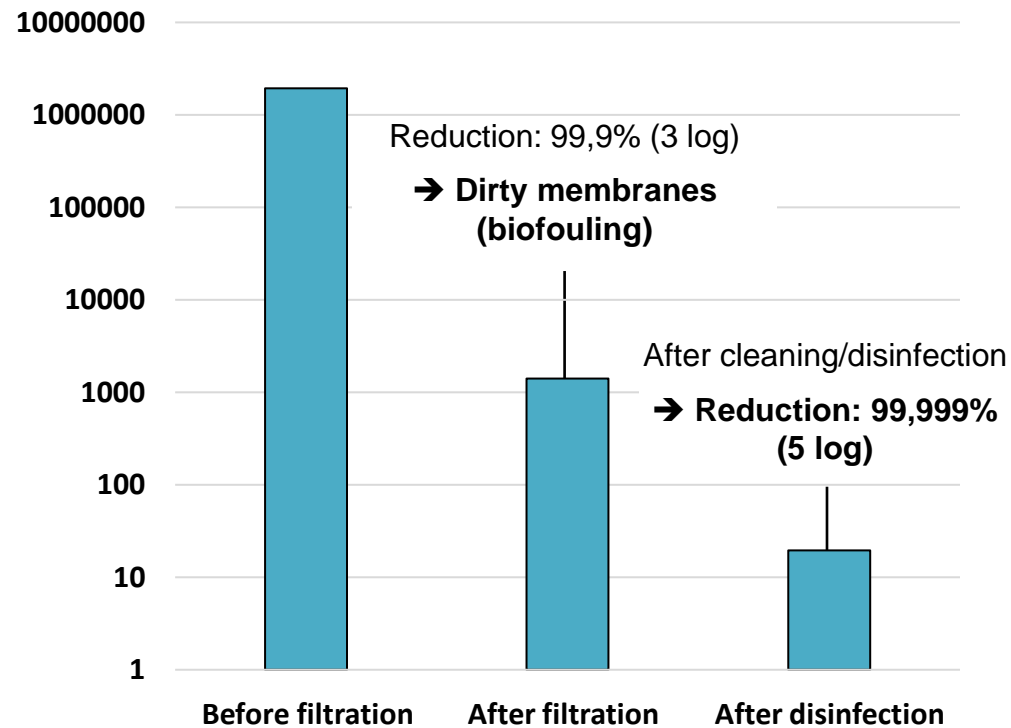


## CLIENTS' FEEDBACK

## ASSESS THE PERFORMANCE OF THE DRINKING WATER PRODUCTION PROCESS



## EVALUATE AN ULTRA-FILTRATION PROCESS



*Study carried out by Inovaya*



- Trigger cleanings.
- Detect biofouling and clogging.
- Validate the membrane efficiency.



Danube Delta: Romania

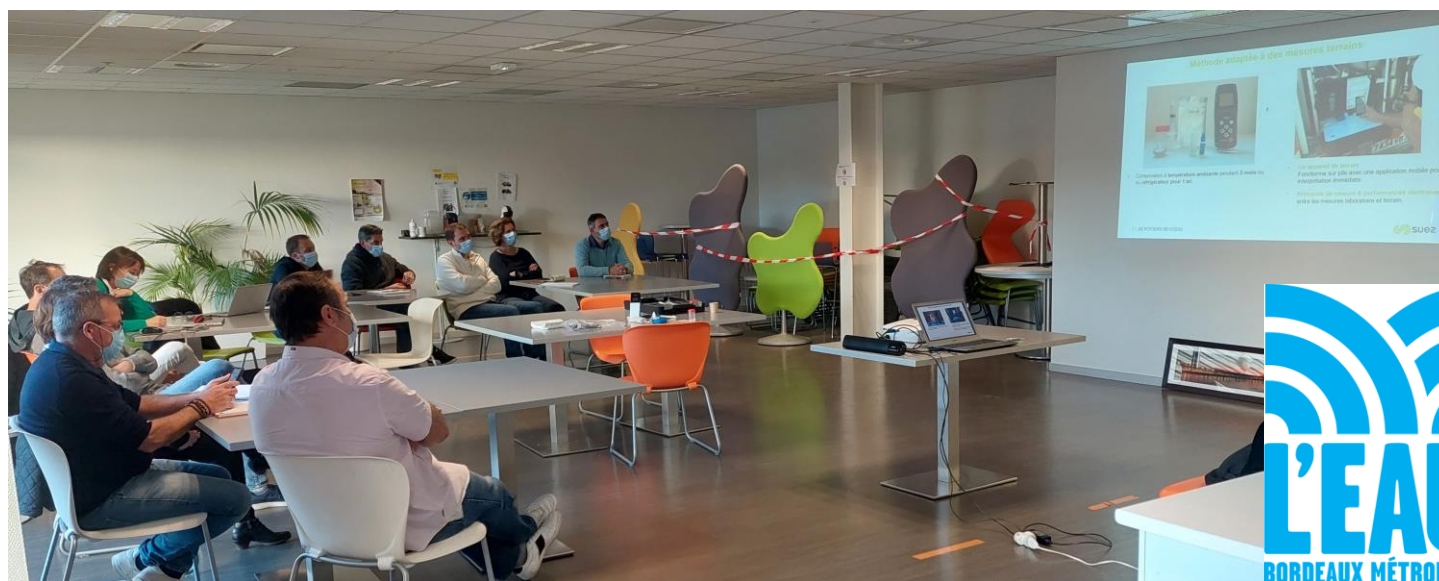


Philippines





# TRAININGS



## CUSTOMER REVIEWS



**Michel A.**

*SUEZ Ile-de-France*



Since 2015, we had the opportunity to test the **robustness** of ATP tests in a wide range of situations. Even though it cannot replace conventional analysis methods for now, **ATP tests provide information on the bacterial activity at very short notice**. We use it to identify critical areas, as a **decision support tool** in crisis situations, and as a **validation tool** for commissioning of pipelines.



**Adélaïde K.** - *Régie des eaux de  
Montpellier Méditerranée Métropole*



I use ATP tests to monitor the water microbial quality after purification. For instance, we wanted to assess the impact of temperature fluctuations and water supply changes on the water quality. **This kit enabled us to define a masterplan to develop and implement WSPs**. More than just commercial exchanges, our interactions with GL Biocontrol are richly rewarding.



**Nicolas F.**

*Eaux de Marseille*



The ATP tests offered by GL Biocontrol appeared to be **very promising**. All the tests performed – monitoring of raw water, of the production plant or supply system – reveal the **sensitivity** and **responsiveness** of the method. The major challenge for the coming year will be to generalise this method to improve further the quality of our water production.





## CUSTOMER REVIEWS



**Adeline K.**

*Veolia Eau Région Grand Est*



Veolia tried out the ATP tests to monitor the water microbiological quality in many operational situations. For instance, cleaning of water storage tanks, disinfection of new piping, or after consumer complaints.

In addition to conventional analyses, this method allows us to be more **responsive** in case of crisis, and thus to **save valuable time** on the field. The trials with GL Biocontrol are **very promising** and our collaboration is technically **very enriching**.



**Fabrice P.** - *Régie de l'eau de  
Nantes Métropole*



The GL BIOCONTROL's ATP tests are a very helpful tool both on the field and in the lab. It is currently used by Nantes Métropole to decide whether or not to re-commission the piping after disinfection or repair. Which help **saving time and money**. Also, ATP tests are used to monitor more frequently the quality of our major storage tanks and thus **get a better view** on the efficiency of our chlorination systems. Soon, it will be used to carry out a **study on the chlorination's efficacy** in response to rising temperature in summer.



**Brice G. & David S.**

*Grenoble-Alpes Métropole*



The acquisition of the ATP system at the end of 2019 opened new water management perspectives.

Although its use has not yet been validated by the Health Authorities, this tool is a great decision support tool which allows us to assess the urgency of the situation. [...] Therefore, when a water degradation is reported by a user or by a noncompliant analysis, ATP tests gave us a **first quick estimation** of the water quality, while waiting for the laboratory results. [...]







# GL BIOCONTROL

R A P I D M I C R O B I A L D I A G N O S T I C

**ANY QUESTION? CONTACT:**

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