

HARMFUL ALGAL BLOOM MONITORING



The French town of Istres has installed a number of connected solutions to monitor parking usage, water temperature and air quality at its beaches on the Étang de Berre, a lagoon located a stone's throw from the Mediterranean coast.

The town uses Ecomesure's EcomSmart solution to continuously measure formaldehyde (H-CHO) and hydrogen sulfide (H₂S) levels. Both gases, which are toxic when inhaled in high concentrations, are emitted by algae as it decomposes.

Whenever these levels exceed the permissible limits, EcomSmart alerts the town's authorities in real time so they can block access to the affected beaches.



EcomSmart

i-comesure.com
secure serverOnline platform for viewing
and processing data

ADVANTAGES



- Robust system that blends seamlessly with its surroundings
- Configurable: multiple power supplies and various communication protocols
- Remote management and control of each sensor
- Customizable alert thresholds

Four reasons to install a coastal air quality monitoring system

- Monitor strategic locations: popular spots, areas near homes, sites of recurrent blooms.
- Identify conditions that can degrade air quality.
- Take steps to inform local communities and ensure the safety of beachgoers.
- Identify improvements or degradations in air quality due to industry, voluntary efforts and regional initiatives put in place.

Implementation of the solution

Each sensor measures the following parameters:

- Formaldehyde (HCHO)
- Hydrogen Sulfide (H₂S)
- Temperature (T)
- Relative Humidity (RH%)

EcomSmart is fully powered by a solar panel, battery and charge controller.



The data collected are transmitted via 4G to Ecomesure's i-comesure online management and analysis platform.

