

SUEZ SITA Donzère, France

Continuous monitoring of odors in correlation with the perception of local residents



«The dynamic odor maps [...] reflect the odor intensity perceived by local residents very well. This allows us to directly assess the impact of our activities on the neighborhood. Obtaining these observations more easily, allows us to devote more time to the development of preventive or corrective actions to reduce potential nuisances.»

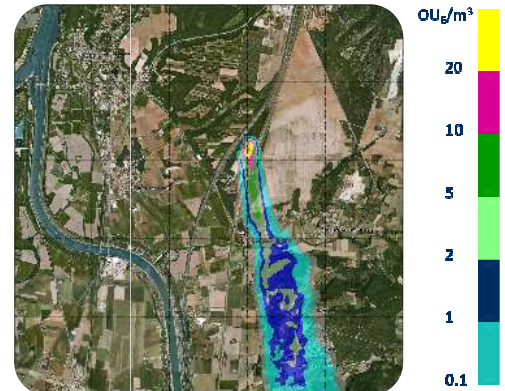
Fayçal Hassad, Site Manager

The site

- Non-hazardous waste storage center
- In operation since 1987, at Donzère, France
- 150.000 tons of waste processed each year
- 15 ha in use out of a total of 30 ha
- ISO 14 001 certified

Challenges

- To identify odor sources
- To better understand the mechanisms of odor dispersion
- To obtain instrumental results, correlated with the perception of local residents
- To assess the odor footprint of the site in real time
- To rely on historical measurements to communicate with local residents and community



Dynamic odor map

Solution

Three complementary approaches:

- RQ Box solution for odor and gaseous pollutants monitoring, including:
 - a RQ Box electronic nose
 - a wireless communication system
 - a weather station located on site
 - 4D atmospheric dispersion modeling software
- Daily local resident surveys to assess their potential discomfort
- Daily record of site operations

Results

- **Continuous instrumental measurement correlated with the perception of local residents**
- **One of the decisive elements in the site's extension authorization**
- **Easy-to-understand results, available in real time**
 - ⇒ Better process control allowing the limitation of nuisances
 - ⇒ Real time alerts when thresholds are exceeded
 - ⇒ Saving time for the monitoring of nuisances
 - ⇒ Easier communication with local residents and authorities