D-NOSES

Distributed Network for Odour Sensing, Empowerment and Sustainability

GOOD PRACTICES IN ODOUR POLLUTION

WWTP in Athens, Greece

#dnosesEU
#odourObservatory

Abstract

Brief introduction to the problem - summary

The main municipal wastewater treatment facility of Athens, started operation during the 1980s. As of the mid 90's several revamping phases were implemented in order to upgrade the facility in terms of operation and environmental compliance. The odour issue was significant till the mid 2000's, but several investments for deodorizing and better treatment of the WWT feed, led to the minimization of the problem.

Problem description

What is the plant(s) type, size, location, technical characteristics?

Municipal WWT South West of Athens, accepts more than 700k m3 per day of sewage.

What was the problem? How many citizens were affected and for how long?

Intense odour incidents that affected a quarter of Athens city population, seasonally for almost two decades.

Reporting phase

How was the problem raised? How were complaints reported?

Reported at the press and protests near the area of the facilities.

Monitoring phase

Was the problem monitored? If yes, how? Which techniques/ methods were applied?

No information available.

What was the result of the monitoring phase?

No information available.

Evaluation phase

How was the data analyzed? How could the collected data be accessed?

No data available publicly.

What was the outcome of the data analysis?

No data available publicly.

Resolution phase

How was the problem solved? Which technology was applied?

- Pre-treatment process with removal of heavy solids, gridding, removal of sand and deodorizing.
- The pretreated sewage is transferred with submerged pipelines in the facility.
- Primary sedimentation tanks collect the primary sludge.
- Advanced secondary biological treatment with activated sludge system achieves removal of organic load and significant reduction of nitrogen.
- Digestion, dehydration and thermal drying of sludge are the stage of the wastewater treatment.
- The processed outflow of WWTP is diffused through pipelines

Who/ How were the different stakeholders involved in the solution of the problem?

Consortium of companies and the Water Supply and Sewerage company publicly owned

How much did it cost? Who paid for it? How long did it take?

The revamping lasted about 3 years.

Verification phase

Did the solution work? Was the impact reduced?

The solution worked and the impact is reduced with no reported incidents throughout the year

How was the effectiveness of the applied solution monitored?

The company running the facility, monitors and reports a series of parameters regarding the process and environmental outcome, therefore covering the odour requirements.

Communication phase

What happened after that?

Several newsletter were published.

Was the public properly informed about the end of the process?

Yes, through the portal of the managing company.