

CASE STUDY

AZZURO

AZZURO, INC.
PO Box 27590
Scottsdale, AZ 85255-0143
USA
tel: +1.602.903.3918
email: info@azzuro.com



SPECIFICATIONS

Application:
H₂S and VOC emission control from
Refinery - API Separator

Air flow:
975 m³/h

Contaminants:
200 ppm avg. - 400 ppm peak H₂S
100 ppm avg. - 200 ppm peak VOC

System configuration:
1 x Torrenta 36-1 followed by Carbon

Removal efficiency:
99.5% H₂S and 95% VOC

Footprint:
Varies

Height:
12 feet

Reactor material:
FRP

Media material:
Spacious Wire Pac (SWP)

Installed in:
March 2012

Azzuro's Know-How Team designed a Specialist, small system - capable to treat high concentrations of H₂S and VOCs. In one System!

CASE STUDY: PARANÁ, BRAZIL / PRESIDENTE GETÚLIO VARGAS REFINERY (REPAR)

REQUIREMENT

Increased regulation of emissions at refineries around the world has forced oil company Petrobras to make some drastic changes in how they operate.

At the REPAR refinery, Petrobras needed to immediately remove their existing API (oil/water) separator and install an emission control solution on the water reuse project to ventilate and clean the air to meet emission and safety regulations. With the emissions ranging all the way up to C¹⁴ (BTEX and diesel fumes) an extremely reliable and innovative technology had to be selected.

Biological odor control was chosen as the emission control technology due the excellent treatment, cost savings, minimum down time and overall safety of the system.

SOLUTION

Azzuro was selected as the provider of the biological odor control system recognized for its tremendous capabilities and track record of removing large concentrations of H₂S and VOC.

Azzuro teamed up with Centropjekt (the system integrator) to optimize and design a system capable of operating in normal conditions, but also catch peaks in emission during crude oil changes.

Azzuro's solution was to install a Torrenta 36-1 Azzuro Bioreactor followed by one small Carbon Unit. During normal operation, the Azzuro biological reactor treats 99.5% H₂S and 95% VOC. The small carbon system installed downstream of the biological system will catch any possible extreme peaks during a crude oil change. The carbon is guaranteed for one (1) year.

The system has exceeded all of the expectations of Petrobras and they are currently installing similar Azzuro systems at other refineries.