



Corporate

## Odors Treated at Sewage Treatment Plan on Lake Garda Neighbors' complaints stopped and Facility could be inaugurated.

**BACKGROUND** A sewage water treatment facility, situated in a touristic area on Lake Garda, in Italy, collects the sewage water from the surrounding area and brings it to the treatment plant, recently built into a cavern facing the lake. During its first year of operation in 2011, the plant was facing an odor migration problem because of the extra load of water to be handled caused by increase of people due to summer tourism in the area.

When the Facility received odor complaints from area residents, hotels and tourists it was eager to resolve the problem in order to retain good neighbor relations essential for its survival. The Facility treats the sewage water using a biomass system and therefore was familiar with biological treatment and recognized that bio-oxidation, combined with careful control of odor generation, is the best technology to eliminate the odors.

ARPA, the Environmental Agency of the area, which was studying CAP technology for possible application on currently unsolvable problems, proposed U-earth to install a few biological units in order to solve the problem.

Six CAP Clean Air Plant model CAP5000 units, each with a nominal capacity to process 500 lbs of pollution per day, were set up at the Facility while ARPA closely monitored the efficiency. The CAP5000s were placed inside the cave, close to the source of most offensive odor. Containment of the odor to the cavern was the goal to be reached. Situated approximately 15 mt apart, the CAPs' radius of influence overlaps and guarantee odor destruction before it can travel elsewhere.



**RESULTS** A reduction in odors was immediately apparent. Odor complaints from the surrounding community have been reduced by more than 90% and finally the plant could be officially inaugurated by the Italian minister of environment in person during full operation in summer 2012.

---

**BIO-HYGIENICS** Compact and portable treatment plants that use biological oxidation to clean air or water in real time.

---

- CAP™ CLEAN AIR PLANTS**
- **Winner of Technology Merit Award.**
  - The CAP is recognized by the Environmental Business Journal for innovative biological treatment of indoor air quality.
  - CAPs employ biocatalysts that convert organic pollution like carbon monoxide, ozone, benzene, and other hydrocarbons to water and carbon dioxide.
  - CAPs are standalone, portable units, which can be placed anywhere in areas of high pollution.
  - Odors and air contaminants, produced by chemical vapors, toxic gases, and mold are eliminated.
  - CAPs can be used to surpass OSHA standards for air in the workplace.
  - Used in the workplace, CAPs lower health risks, increase comfort and productivity, reduce exposure to liability, and encourage good management practices.
  - CAPs also remove cigarette smoke, pet dander, pollen, dust mites, mold, and other allergens.
  - CAPs can even oxidize and destroy airborne bacteria and viruses, as well as sudden influxes of chemicals and biological contaminants.
  - Turn off your present treatment systems and save thousands with CAPs.