SOLIA™
The new generation of solar sludge drying
SOLIA™ Solar sludge drying

As a pioneer and expert in solar sludge drying, Veolia Water Technologies offers SOLIA, a cost effective and environmentally friendly solution for reducing the amount of water in sludge.

This process can achieve a dry solids content up to 85%, reducing sludge volume and removal costs. SOLIA opens the way to all outlet disposal routes: agricultural reuse, composting, landfill, incineration and co-incineration.

Operating principle
Based on combined solar drying and bio-drying, SOLIA dries and stores sludge in a horticultural greenhouse under continuous ventilation with dry air from the outside.

Dewatered sludge and drying sludge are mixed into drying sludge and spread throughout the greenhouse as windrows by the SOLIA windrow turner.

Specificities of the SOLIA™ Mix process
Bio-drying and sludge storage as windrows are specificities of the SOLIA Mix process that promote a rise in temperature in the core sludge. This way the amount of dry solids to be disposed of is reduced and the pathogens contained in the sludge to be dried is partially eliminated.

Main advantages
- Reduction of sludge volume by 3 to 4 times
- Environmentally friendly process
- Fully automated process operation
- Aesthetic and easily integrated architecture
- Sludge storage before reuse
- Uses renewable energy sources
Our options for meeting your specific needs

Floor-heating or air-heating systems

To ensure consistent performance throughout the year, SOLIA Mix may be fitted with an additional energy source to complement solar power.

This energy input reduces both the greenhouse surface area and the drying cycle duration while maintaining the treatment capacity, regardless of adverse climatic conditions.

ACoDry, intelligent ventilation management

To optimize the greenhouse’s energy performance when air renewal may represent as much as 90% of electric power use, Veolia has developed ACoDry, an intelligent command and control system for ventilation management. By analyzing and adapting key parameters*, ACoDry halves the electric power needed to achieve a given level of drying performance.

* Like humidity, temperature, sunlight and sludge characteristics.

Efficient odor treatment

Surrounding communities are often sensitive to sludge treatment processes. Based on the local context and characteristics, Veolia offers the Aquilair™ or Alizair™ patented solutions designed to reduce odor emissions and provide optimal comfort.

Among our 30 references

○ Bras-Panon, Réunion Island (2014) –
  204 TDM = 225 DT/year (Dry Tons per Year)
  680 m² = 7,310 ft²

○ Belchatow, Poland (2014) –
  1850 TDM = 2040 DT/year
  6144 m² = 66,130 ft²

○ Saint-Michel-en-L’Herm, France (2013) –
  120 TDM = 130 DT/year
  300 m² = 3,230 ft²

○ Pia, France, (2011) –
  242 TDM = 270 DT/year
  947 m² = 10,190 ft²
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