

# Deployable

## Flovac Deployable Sewerage Systems

Ideal for camps from 50 people to 5,000

- Mining Camps and Fly Camps
- Refugee and Emergency Centres
- Event Infrastructure
- Military Camps

In temporary camps, whether emergency, mining, concerts or military, sewage needs to be transported from ablution blocks, kitchen areas, laundries, and rooms to an area to be treated. Putting pipe in the ground can take time, be expensive and damaging to the environment.

A deployable vacuum system operates with three components. A containerised vacuum pump station that is built to withstand extreme transport and climate conditions, is placed next to a containerised treatment plant where sewage can be re-used in the camp. Collection points are placed around the camp, above the ground, which are fed via gravity flow. All pipework can be laid above the ground or in shallow, combined service trenches.

In an emergency refugee camp, the risk of contamination from raw sewage going into the drinking water or attracting disease-carrying mosquitoes is very high. This solution is low-cost and easy to transport, allowing for all sewage to be safely collected and treated.

All components of the system are deployed to site in containers and laid on the ground easily. Power is only required at the pump station which is in the same area as the other camp utilities. No sewage overflows can occur.



Containerised vacuum pump stations integrated with wastewater treatment plants



Pipework can remain above ground for easy mobilisation



Low water use vacuum toilet systems for remote locations

# Deployable Sewerage System

	Gravity	Flovac System	Grinder Pumps
Electrical Requirements	Power at each pump station	Power only at single pump station backed up by generator	Power at each pump
Collection Point	No restriction	Can be above ground	Must be below ground
Overflows	Can occur undetected	Cannot get leaks from the pipework	Surging sewage can cause major health issues
Cost	High cost due to construction	Lowest cost as no heavy construction involved	Construction Costs, shallow trenches, plus demobilisation cost
Operating Cost	High cost of fixing pipe laid in deep trenches, or locating blockages	Low cost maintenance, all infrastructure above ground	Mechanical pumps have problems in extreme weather conditions and sandy environments
Environmental Impact	Impact through, construction and contamination	No Environmental Impact.  Energy and water savings	Impact through energy use, construction and contamination
Capital Cost	High mobilisation and construction cost	Low, all equipment can be leased or sold	Low Infrastructure but high construction cost



Flovac's Deployable Vacuum Sewerage System can be deployed to site and established within 24 hours. Upon re-deployment can be packed and ready for transport within 24 hours leaving the site as you found it.

- All equipment supplied in 20 ft standard containers
- Collection pipework laid above the ground or buried at minimum depth and collects all wastewater within the camp
- All systems pre-tested and commissioned prior to delivery and suitable for all climates
- No leaks
- No Overflows
- Low Cost
- No Odours
- Fully Monitored
- Environmentally Friendly
- Low Maintenance
- Easy Installation