SLUDGE STORAGE & TRANSPORT SYSTEM

Alawir Sewage Treatment Plant, Dubai, UAE

The sludge produced in Alawir sewage plant in former times was spilled on open area, causing bad odors and health hazards. So the inhabitants of the nearby Dubai International City were suffering from this problem.

The Dubai International City management with the assistance of Dubai Municipality studied the problem. For solution a contract with MENA WATER FZC was signed to build up a closed sludge handling system.

Start up of the plant was in December 2008.

The project was divided in two steps:

1st Phase:
Immediate action: transporting the accumulated sludge (over 100 000 tons) from the plant to be buried underground outside the plant. At the same time an odor resisting spray solution was applied to eliminate the odors.

2nd Phase: Construction of a complete sludge handling system, which is fully enclosed to prevent releasing of any odors. The system is consisting pumping, piping, silo storage and lorry filling.

PROJECT DATA

- pipe system for sludge transport through DN150-DN350 L=150m
- 4 sludge pumps 4x 12 m³/h.
- 2 sludge silo with slide frame system for one day capacity 2x 400 m³ H = 12m
- Odor control system with photoionisation to treat the odors from the venting points.
- Tip trucks for sludge-transport from the silo to disposal site