



VUAB PHARMA: WWTP OPTIMIZATION AND MANAGEMENT

Pharmaceuticals

O&M contract for water services to comply with environmental standards.

| The challenge

On its industrial site at Roztoky, VUAB Pharma (ICN) operates a 350 m³/d wastewater treatment plant not too far from the municipal wastewater treatment plant. Treatment systems of both plants had to be improved and modernized to comply with the environmental standards.

| Veolia's solution

VUAB Pharma and the city of Roztoky took Veolia Water on for the optimization and management of the combined industrial and municipal wastewater treatment systems.

Veolia Water's scope of services includes the following steps :

- Anaerobic pretreatment of industrial wastewater streams on the VUAB Pharma site and use of biogas for steam production in one of the VUAB Pharma boiler rooms.
- Industrial pretreated wastewater and municipal wastewater are mixed and treated by nitrification/denitrification at the municipal wastewater treatment plant at Roztoky.
- The sludge from the municipal wastewater treatment plant is transferred to the VUAB Pharma plant for centrifugation and composting.



Roztoky, Czech Republic



Contract Facts:

Duration: 15+10 years
until 2026
O&M

350 m³/d
Wastewater

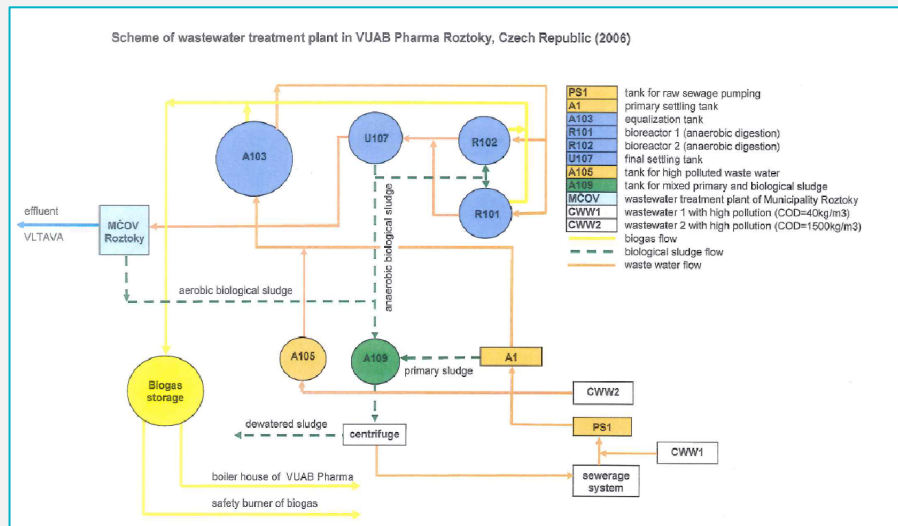
600 m³ of
biogas per
day

Sludge treatment



The technology of this wastewater treatment plant is composed of primary sedimentation, equalisation with capacity 1700 m³ followed by two anaerobic reactors, each with capacity 900 m³, degasing tank an sedimentation tank. The anaerobic reactors are heated up to 35°C, with biogas production in about 600 m³ per day. Due to the long retention time the biogas contains approximately 75% of methan but unfortunately it is highly polluted by hydrogen sulphid as a product of sulphate reduction.

- Anaerobic sludge concentration : 10-15 g/l
- Volume loading rate : 4 kg COD /m³,d
- Sludge loading rate : 0.35 kg COD/kg VSSd



| The benefits

Signed in 2000, this long term contract has enabled ICN Pharmaceuticals (VUAB Pharma Ltd) to minimize the required investment to upgrade its wastewater treatment process and to work more closely with the municipality.



PLANET

Cleaning of industrial wastewater in
the environmental protection.