



Wastewater treatment in Chemical Industrial Park Knapsack

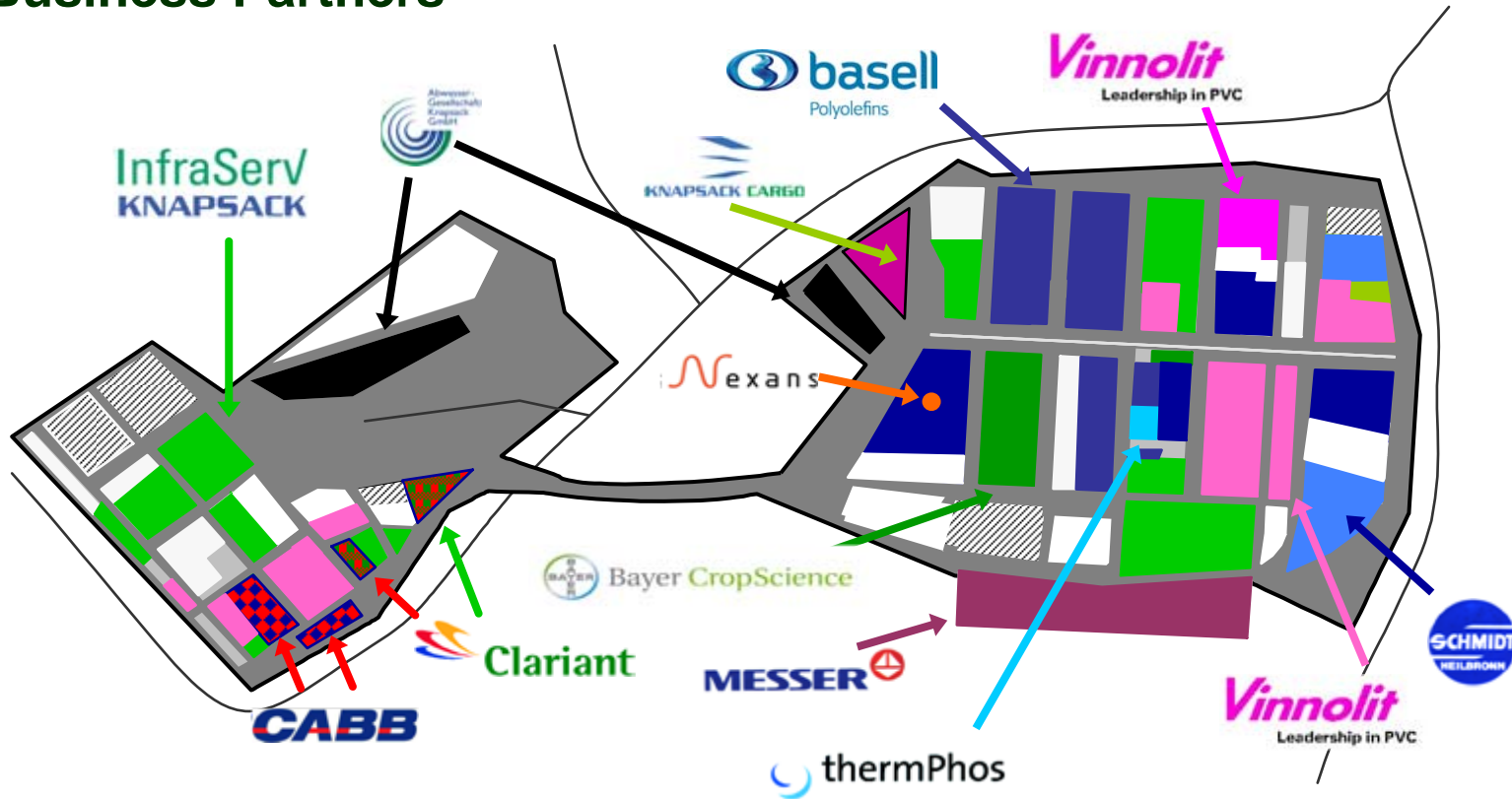
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Survey

1. General
2. Sewer system
3. Wastewater treatment plant Hürth (scheme und aerial view)
4. Wastewater treatment plant Knapsack (scheme und aerial view)
5. Capacities, load and limit values 2009

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Business Partners



Wastewater treatment in Chemical Industrial Park Knapsack

- **Wastewater producers and collectors** (18 companies)
 - 33 production plants
 - approx. 35 km subsidiary sewer of production plants

- **Main sewer** (InfraServ Knapsack)
 - approx. 28 km main sewer

- **Central waste water treatment plants** (Abwasser-Gesellschaft)
 - 2 central waste water treatment plants
 - approx. 260.000 population equivalents
 - investment since 2000 : 8,3 Mio. €

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Sewer system

Length: ca. 63 km,
 thereof approx. 28 km main sewer,
 approx. 35 km subsidiary sewer

Diameter: 100 mm bis 1800 mm

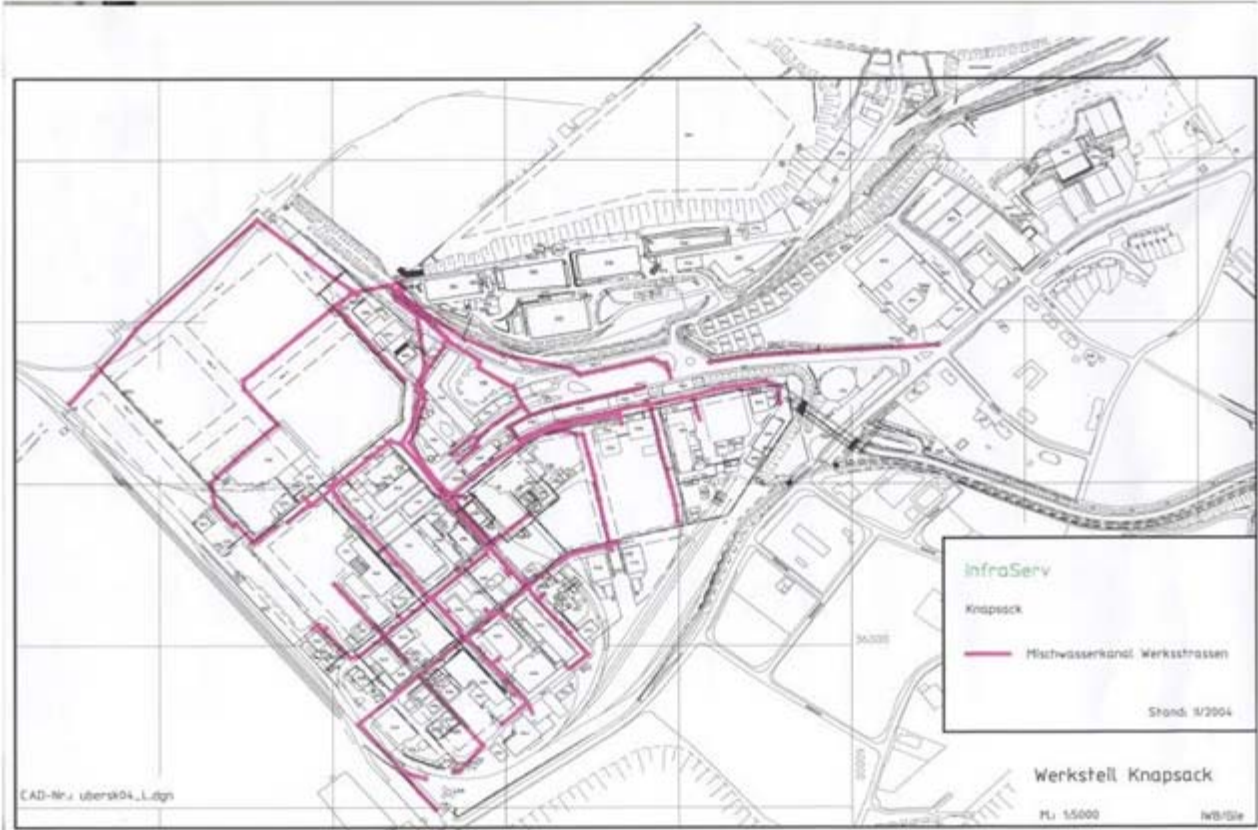
Materials: PP, PE, stoneware, concrete (beton)

Amount of shafts: approx. 1700

Depth: 0,5 bis 14,0 m

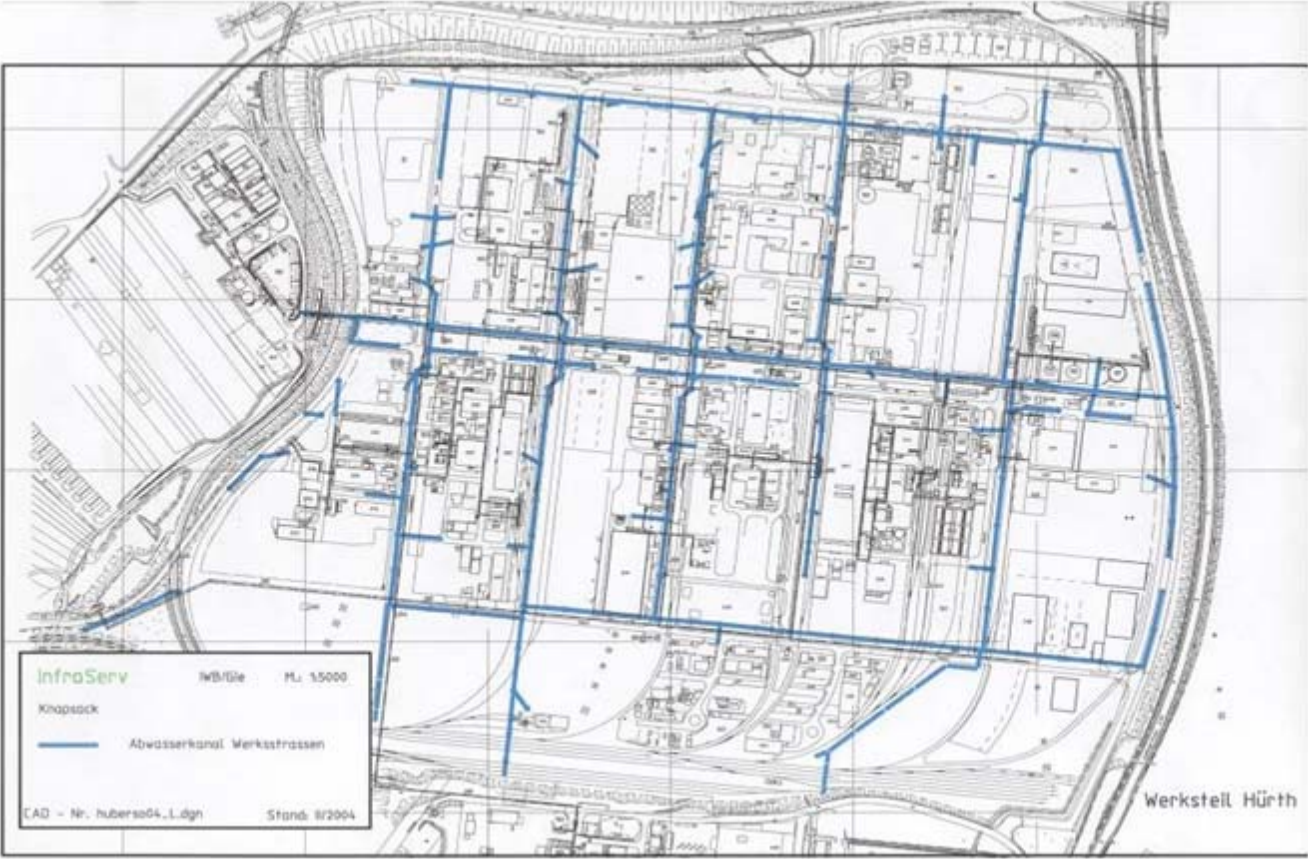
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Sewer system Knapsack



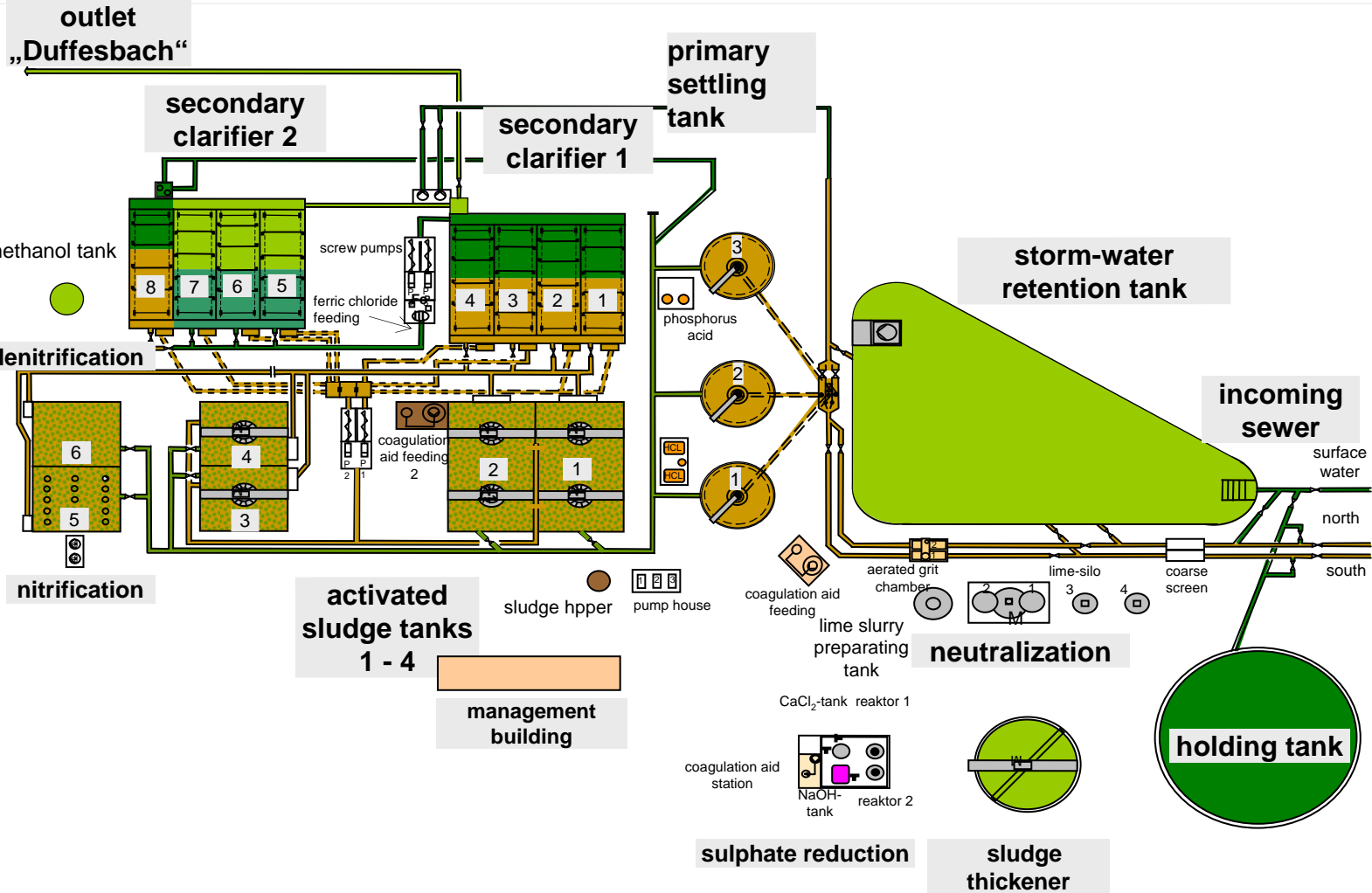
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Sewer system Hürth



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Scheme of wastewater treatment plant Hürth



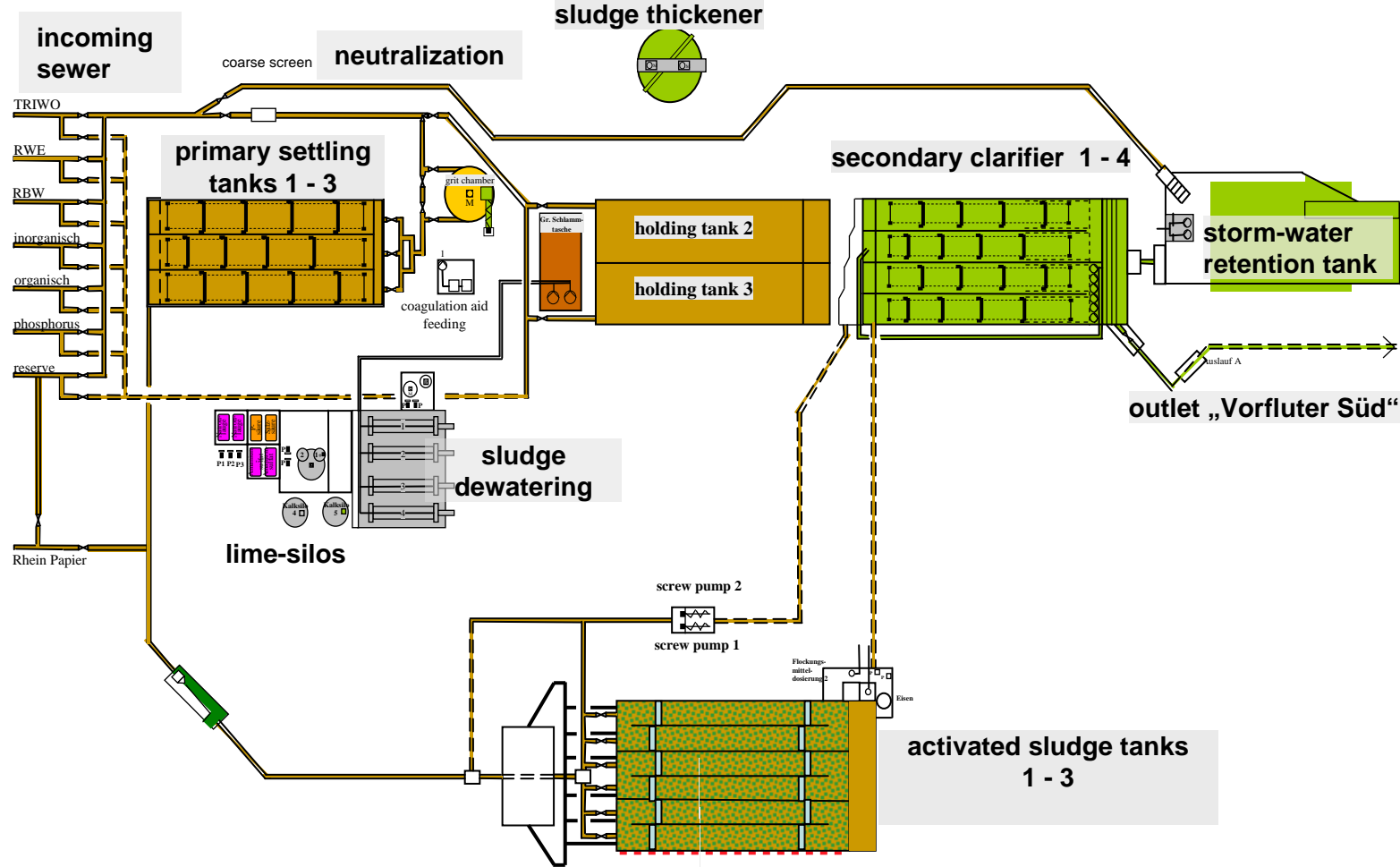
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Arial view of wastewater treatment plant Hürth



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Scheme of wastewater treatment plant Knapsack



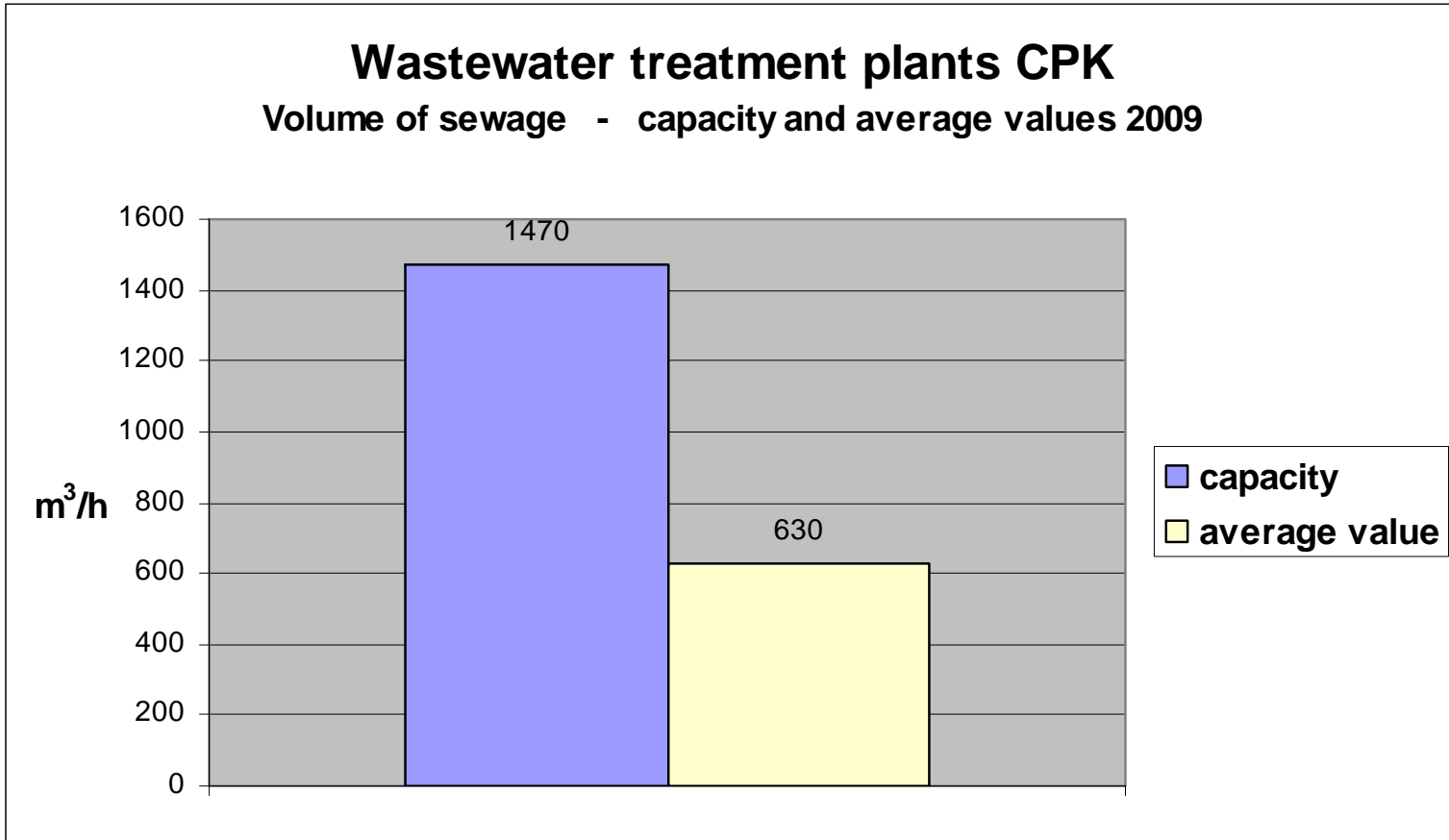
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Arial view of wastewater treatment plant Knapsack



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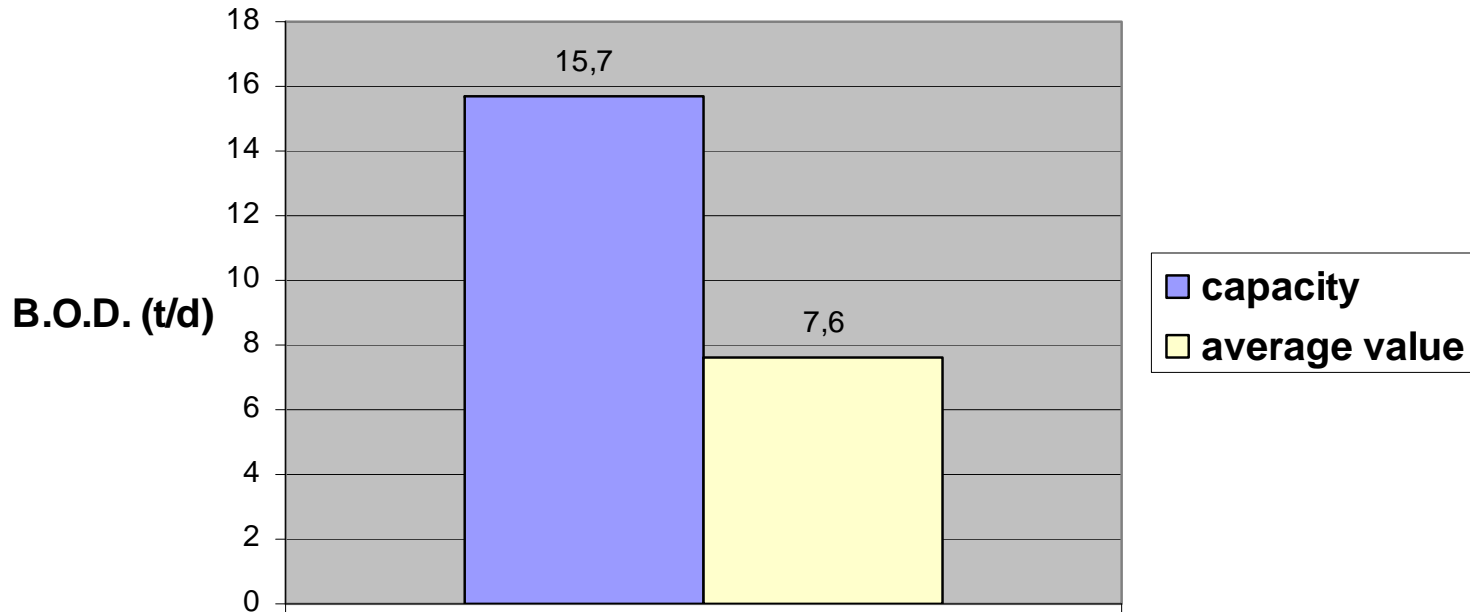
Hydraulic load



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Load of biological oxygen demand (B.O.D.)

**Wastewater treatment plants CPK
B.O.D. - capacity and average values 2009**



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Average values COD, phosphorus and nitrogen 2009 Hürth

Waste water treatment plant Hürth
average values for COD, phosphorus and nitrogen 2009

