

# Co-treatment WWTP

Co-treatment at E-Piim Tootmine and Põltsamaa Varahalduse



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Põltsamaa Varahalduse limited company  
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# History

- Põltsamaa MWWTP was built in 1983 and is still located in the same place
- MWWTP was constructed with the financial aid of two food industries that were predecessors of food companies today - E-Piim Tootmine Ltd and Põltsamaa Felix Ltd (today with new name Orkla Eesti Ltd).
- During the independency of Estonian Republic and reforms following the event Põltsamaa MWWTP was acquired by local municipality in 1990s.
- In the beginning municipality rented the WWTP to the private company.

# History

- Põltsamaa Varahalduse Ltd. Was established in 2003 mainly with the need of investments and possibility to apply for fundings from EU Cohesion Fund
- During that time about 40% of Põltsamaa wastewater collection area was not covered with sewer collection nor water distribution systems. Existing piping had also severe need for reconstruction.
- Põltsamaa MWWTP was also in need for reconstruction as environmental requirements became more strict and the existing MWWTP was not able to treat efficiently the fast-growing food industry. An absence of dewatering facilities became more critical with each day.

# History

- My history in water sector started in 2003 when I started to build up a new municipality owned water company Põltsamaa Varahaldus Ltd.
- During that time my first contacts with food industry (incl. E-Piim Tootmine Ltd.) were established.
- It became critically clear that it was not possible to increase the capacity of existing MWWTP during the reconstruction process (there were some financial limits).

# History

- During the reconstruction phase there were A LOT OF MEETINGS starting with designers, process engineers and ending up with personal contacts with mayor.
- As a result of these meetings E-Piim Tootmine Ltd. constructed pre-treatment facility in 2006.
- By the same time reconstruction works in Põltsamaa MWWTP were carried out and issues with sewage sludge dewatering were solved (a centrifuge was installed).

# Cooperation with industry

- E-Piim Tootmine Ltd and Orkla Eesti Ltd are big food industries in Estonia scale. These two factories give ca 60% of the wastewater load.
- The communication between water utility and industries has to be as frequent and constructive as possible.
- We are always taking it into account that industries are our clients.
- If looking at the time period between today and 2003 it has to be concluded that cooperation and communication (incl. solving the issues) with industries has become better over time.

# Cooperation

- BEST project contributes into increasing cooperation between E-Piim Tootmine Ltd and Põltsamaa Varahaldus Ltd – today I represent two companies
- Today the capacity of balancing tank in E-Piim (40 m<sup>3</sup>) is too small and is limiting the efficiency of existing pre-treatment facility



# Cooperation between industry, water utility and BEST

- Increasing the capacity of balancing tank will help to stabilize the wastewater peaks and to increase the efficiency of pre-treatment.
- BEST project helps E-Piim to construct a bigger balancing tank
- As a result Põltsamaa MWWTP will have a little less loading from industry, but we can expect more stable process and better effluent quality



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