

Pre-treatment at dairy company E-Piim and cooperation with Põltsamaa WWTP, Estonia



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Organisation Põltamaa Varahalduse and E-Piim Contact Kuldar Kipper

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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 m³) 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











Investments during the project

- New balancing tank in E-Piim Tootmine Ltd
 - Last tender failed due to the incomplete offer
 - New tender is in preparation
- New sampling equipment in Põltsamaa Varahaldus Ltd.
- Study of hazardous substances in Põltsamaa wastewater collection area











We bought a new sampling equipment

- Portable sampler P6 Mini Maxx
 - Portable vacuum based sampler
 - microprocessor control
 - battery-operated
 - with 1 x 10 L PE container and battery.













Portable sampler at work













Portable sampler at work













Portable sampler

- We have taken some samples already and we are happy with the new equipment
- The new sampler improves our capability in monitoring (industrial) influents and effluent from WWTP
- The understanding of sewage quality in diferent parts of wastewater catchment area can be more efficiently monitored
- This device will be also used during the study of hazardous substances in Põltsamaa











A study on emmiters of hazardous substances in the collection area

- An aim is to understand if and how big issue are hazardous substances in Põltsamaa
- The study is dividend into two parts:
 - **1. Sampling** in pumping stations in the collection area and in WWTP in order to assess if there is any spatial distribution of hazardous substances within the city and to understand what are the most problematic substances
 - 2. Site visits to the most problematic (?) areas/industries. Reccomendations for better control of hazardous substances in the catchment area with the aim of fulfilling effluent quality standards.











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Some additional information

- Põltsamaa located in the center of Estonia: <u>https://goo.gl/maps/u3NR5N7WAhPSYqRx5</u>
- <u>https://www.youtube.com/watch?v=4au2rEnuHd4&featur</u>
 <u>e=youtu.be</u>

<u>https://www.youtube.com/watch?v=0mIf8V0qxLc&featur</u>
 <u>e=youtu.be</u>









