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#### Project BEST Newsletter #3













Dear project BEST stakeholder! You are receiving this letter, because we think you might be interested in knowing about the project and would like to be informed about the project proceeding. If you don't want to get this newsletter in future, please contact Project BEST communications manager Miitta Rantakari (firstname.lastname@hel.fi).



### Fourth Project BEST workshop was arranged in Riga

The special focus of this event was on food and dairy industry and the speakers presented very interesting cases about new investments and well-established pretreatment of industrial waste waters and

about cooperation between the industry and the local treatment plant. Furthermore, legislation and regulation requirements of these effluents was also covered. The workshop participants had an opportunity to visit the municipal wastewater treatment plant of City of Ādaži and the nearby potato processing factory Ādažu Čipsi discharging effluents to the waste water treatment plant. Ādažu Čipsi has built a small but modern waste water pretreatment plant to decrease starch and fat loads to the municipal plant and the cooperation

### Welcome to fifth international BEST event in Kaliningrad

Fifth BEST event will be arranged in Kaliningrad, Russia 26-28 November 2019. The event will focus on pre-treatment possibilities for different industrial effluents. Further information about the event will shortly be found on our website LINK.





#### New investments and close cooperation in E-Piim cheese factory and Põltsamaa WWTP in Estonia

Põltsamaa waste water treatment plant (WWTP) in Estonia receives waste waters from large food production industries in the area, e.g. from E-Piim cheese factory. The small waste water treatment plant has problems with industrial sewage containing high values of biological oxygen demand and nutrients. In the BEST project, Põltsamaa waste water treatment plant invests in mobile sampling and analyzing equipment to better adjust the treatment process to the real composition of the incoming industrial wastewater. In tandem, E-Piim cheese factory is improving sewage pre-treatment by investing in a regulation tank in order to optimize the flotation process used in pre-treatment. The factory and the WWTP advance their co-operation in order to facilitate further the treatment process at the Põltsamaa WWTP.

Watch the interview with the Project Manager Kuldar Kipper about the investment at Põltsamaa WWTP through this <u>LINK</u>

Watch the interview with the Project Manager Kuldar Kipper about the Epiim investment through this  $\underline{\sf LINK}$ 

# Project BEST arranged an expert seminar on industrial waste water management in Baltic Sea Day, St Petersburg



Project BEST arranged an expert seminar and round table discussions on 21 March 2019 as part of the Baltic Sea Day event. The seminar focused on the management of industrial waste waters in Russia by discussing legislation and its practical implementation. The seminar also highlighted bottlenecks as well as good examples of solutions and cooperation practices among municipal waste water treatment plants and the industry. The participants represented several WWTPs from the Leningrad oblast and Kaliningrad region, Russian national environmental authorities, industries and sectoral agencies from Kaliningrad region, HELCOM, City of Helsinki and John Nurminen Foundation. The round table discussions spawned many new ideas, development needs and prospects for further cooperation. These discussions will hopefully continue in the BEST Kaliningrad event in November.



# Doruchow commune is investing in a new treatment line for industrial sewage at the local treatment plant

The Doruchów commune in Poland is currently operating a small biological waste

water treatment plant (WWTP) based on activated sludge, but the treatment plant needs modernization and more capacity to be able to function effectively. Industrial effluents comprise a large share, up to 80 %, of the total waste water load entering the WWTP. In BEST project, Doruchów Commune is investing in a separate treatment line for the sewage from meat industry facilities in the area. The new treatment line will have post-filtration of phosphorus after the biological treatment. Filtration is based on a highly porous calcium-silicate, which not only removes phosphorus from waste water, but also enables full phosphorus recovery.

Watch the interview with the Project Manager Andrzej Erwinski about the investment through this <u>LINK</u>

### Training for waste water treatment experts in Gdansk

Gdansk Water Foundation arranged a twoday seminar and workshop on 25-26 April 2019 about industrial waste waters and their treatment. The event focused on innovative new techniques for waste water treatment and rational management of



water resources through the recovery of water in industrial plants. Invited experts presented new, available, and at the same time rational technologies for industrial waste water treatment as well as indicated possible solutions for cooperation between industrial plants and sewage treatment plants. The event also covered issues of the formal and legal regulations regarding the discharge of industrial waste water into the sewage system and the purification of polluted or otherwise harmful sewage and possibilities of the reuse.



## Towards efficient management of industrial effluents in the Kaliningrad region

On 27 March 2019, ECAT-Kaliningrad organized a round-table discussion

dedicated to development of cooperation between waste water treatment plants (WWTPs), water utilities, industries and environmental authorities. During the event, also main changes in regional and national legislation were introduced to the audience. Moreover, a moderated discussion and an interactive business game helped participants to put themselves in the other party's shoes and triggered discussion for possibilities for cooperation. Round table participants emphasized the high importance for developing sustainable cooperation models between WWTPs and industries with regard to industrial wastewater treatment. There also is a strong need to improve of WWTPs operators' education level. The opreators also require support from environmental authorities.

### Expert training on impact of industrial waste waters on the activated sludge processes

The Estonian Water Works Association (EVEL) arranged a national training event on 11 June 2019, for waste water treatment



(WWT) experts, public authorities and waterworks personnel. Special attention was given to

the impact of industrial waste waters on the activated sludge processes at the treatment plants. The training event consisted of a seminar where the invited experts presented practical solutions and suggestions for better management of activated sludge process at WWT plants in different situations and possibilities to monitor and improve the process. Furthermore, the presentations gave solutions for industries how to adjust production technology and utilize water reuse in the processes to reduce the amount of forming waste water, and thus, reduce the pollution load to the WWT plant.



## Guidelines for cotreatment of industrial and municipal waste waters are forming

The ultimate goal of BEST project is to produce Baltic Sea Region wide and

national guidelines for treatment of industrial waste waters in municipal waste water treatment plants. John Nurminen Foundation (JNF) from Finland is leading the work of compiling and writing the guidelines, and moreover, all countries participating in the BEST project involve experts to comment and supplement the guidelines. JNF together with City of Helsinki arranged an expert workshop in Helsinki for commenting the draft of BEST guidelines for co-treatment of industrial and municipal sewage. Te experts represented waterworks personnel, water work associations, authorities, research organizations and industries. Very useful comments and suggestions were presented, this is a good premise to continue work both in Finland and around the Baltic Sea Region.

# Current situation in industrial sewage treated in local treatment plants, WP2 work proceeding in Finland and other countries



One of the goals in project BEST is to produce a description of type and volume of industrial effluents currently entering municipal waste water treatment plants (WWTP) in the Baltic Sea Region (BSR). Riga Technical University (RTU) leads this work in which the aim is to assess the most relevant industrial flows, existing cooperation practices between municipal WWTPs, industrial companies as well decision making and permitting authorities and identify possible country-specific features. Each participating country has selected three key industrial sectors with major flows to municipal sewage system and possible challenges with treatment in more focused inspection.

The participating countries have now completed the assessment of our industrial waste waters. In Finland, meat and dairy industry, metal fabricating industry and waste collection,

treatment and disposal waste disposal were chosen to be the target fields for more detailed study. Industrial companies were interviewed to find out if they have an environmental permit or industrial waste water contract or both, about pre-treatment of their waste water and if they have co-operations with the local WWTP. Read more about these results through this <u>LINK</u>.

You get this e-mail, because you are listed as a stakeholder of the BEST Project. If you don't want to receive these letters in future, please contact project communication manager Miitta Rantakari (firstname.lastname@hel.fi)

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