

Newsletter – June 2020

Dear project partners, below you find news, reminders and a short summary of the status of our project.

Management

- A request for prolongation of the project (31 March 2021) has been accepted by the JS and we are now working on the formal documentation including updates of the Subsidy contract annex.
- Fourth report: We are awaiting approval of some of the partial payment claims and then we will finalize the joint report and hand it in to the Joint Secretariat.
- Coming reporting deadlines are: 15 September 2020 and preliminary 15 April 2021.

Pilots and analyses

- The pilot in Kretinga is installed and in operation, see picture below. Sampling is ongoing and analysis of organic micropollutants will be started shortly.
- The pilot in Svedala has been in operation during the spring and supplementary lab-scale experiments have been performed. Data is now being evaluated by Lund University and papers on the direct membrane filtration concept and the separation mechanisms in GAC-filters are being prepared.
- The pilot plant in Slagelse has now been in operation for 1,5 year and a total of 216.000 m³ of wastewater has now been treated. This corresponds to 12.700 activated carbon (GAC) bed volumes. The preliminary results shows that the majority of pharmaceuticals are reduced considerably. Considering bacterial contamination the preliminary results shows that the pilot plant reduces both fecal contamination in general and specific antibiotic resistant fecal bacteria to below limit of detection (< 1 CFU/100 ML). The pilot plant monitoring program is planned to be finished by the end of august 2020.
- Kristianstad has developed the analytical method: As reported previously benzotriazole was added to the analytical method. Benzotriazole is one out of 12 indicator substances included on the Swiss list for evaluating advanced wastewater treatment. Method development has continued during the spring and three more compounds from that list are now being analysed; amisulpride (LOQ 1 ng/L), hydrochlorothiazide (LOQ 2 ng/L) and irbesartan (LOQ 2 ng/L). We now cover 10 out of 12 compounds from the Swiss list.

Communication

- The project was introduced to master students at Lund University within the course advanced wastewater treatment in February 2020.
- The "Pharmaceutical expert cluster LESSisMORE" on LinkedIN is still expanding.
- Information about the project was included in an article with the title: "Pharmaceuticals and the aquatic environment. Threats, removal technologies, EU

projects". The article was published in BMP 2/2020 Pharmaceutical Industry magazine.

- A stakeholder meeting including demonstration of the pilot (with 42 participants) was held in Slagelse 17th of January.
- GWF is following up all communication activities and all partners are reminded to send information to Beata about this.



Figure. Pilot plant in Kretinga, Lithuania

Coming meetings and events

- We are following the situation with the Covid-19 development and we hope to be able to plan a meeting with all partners and participants as soon as it is possible. We sincerely hope that we can arrange a final seminar before the end of the project to summarize all activities and plan for the future!
- In any case we are arranging a digital meeting with all work package leaders in September to plan the completion of remaining activities and deliverables in the project. More information to come.
- Results from the Swedish pilot will be presented at the IWA World Water Congress & Exhibition - Water for smart liveable cities, May 2021 in COPENHAGEN, DENMARK. S. Gidstedt, A. Betsholtz, T. Hey, M. Cimbritz, Å. Davidsson, F. Lipnizki, M. Hagman, F. Micolucci Advanced municipal wastewater treatment by direct membrane filtration followed by granular activated carbon filtration for micropollutant removal

If you have any questions don't hesitate to contact us.

We wish you all a nice and sunny summer!

Åsa & Michael