References

A treatment plant as a shared project

Uponor involvement

- One WehoPuts 70 treatment plant

A treatment plant as a shared project

A small treatment plant that is shared can provide a solution for wastewater treatment in a neighbourhood or a small town, once and for all. This has been noticed, for example, in Ostrobothnia, on the west coast of Finland.
The village of Skaftung is located in Kristinestad, in the southernmost coastal municipality of Ostrobothnia. It is inhabited by both farmers and fish farmers, and its isles and inlets also attract vacationers, bird watchers and Sunday fishermen. On the western border of the village in a very close proximity to the sea, a small window and door factory, plies its trade.

The owner, Rune Lindberg, is a native of Skaftung and a very active one, too. In the autumn of 2009 he started finding out about the treatment of wastewater. At that time, a major part of wastewater drained through septic tanks into the ground and watercourses. Lindberg gathered the residents and vacationers of the neighbourhood together to brood over a possible solution. “There are 44 houses, and they are quite close to each other. It was clear that a shared treatment plant would be more economical than having one for each of them.”

Project Facts:

Location	Completion
Skaftung village, Finland	2010
Building Type	Product systems
Agricultural buildings	Sewer, waste water treatment
Project Type	
New building	

Carefully chosen

In the selection of a wastewater treatment system, both the soil as well as the location of buildings must be taken into account. Rune Lindberg, therefore, approached a designer already at an early stage. A biochemical WehoPuts 100 treatment plant was chosen as the treatment plant. There are approximately 60 yearround residents in the area, so even a smaller plant would have sufficed. Room for growth was left, for example, for a future fish processing plant. In early summer, the village's own contractor dug a trench for the treatment plant, which was duly installed.

Once the pipes needed were in the ground, the plant was ready for use. Lindberg contracted a professional maintenance service. Rune Lindberg makes the treatment plant project sound like a simple task. The project, however, involved 70 people, most of whom also participated in the discussion.

''I have acquired knowledge and shared it with others. People have placed their trust in the project, and there hasn't even been a need to vote about anything'', says Lindberg. He collected the money for the purchases from each participant, and, in future, water meters will provide information about each participant's share of operating costs. Financial management will be kept straight by a cooperative society which was established right at the beginning of the project. In addition, the state supported the project to the tune of € 25 000.

Municipality helping the villagers

Also a village in the municipality of Pedersöre got its share of the state's water management grants for Ostrobothnia. The village, which has 22 houses, is located some way inland from the coast. The village's own water association had, already for a long time, been responsible for the supply of clean water. Each house has conducted its wastewater through septic tanks or wells to the ground.

The villagers knew that wastewater management needed to be addressed as soon as possible. The village is located, however, in the groundwater zone, for which reason separate treatment plants for each property could not even be considered. Admittedly, very few would even have been interested in such a plan. For residents well over 70 years of age, a miniature treatment plant, even when shared, seemed an unnecessarily large project. Decisions were postponed.

''Eventually, we agreed that the municipality will assume the responsibility for the common treatment plant design and construction and will collect subscription fees from the residents in due time'', explains Stefan Hellund who is the municipal Construction Engineer.

The biochemical WehoPuts 70 treatment plant was installed during the summer, and the pipelines were installedin the autumn when the work in the fields is over. A total of four kilometres of sewage lines have been promised.

Miniature treatment plants also for municipalities

According to Hellund, projects related to both wastewater treatment plants as well as connection sewers are constantly taking place in Pedersöre. More than half the population is currently connected to the municipal sewer system. ''The aim is to connect almost 80 houses a year into the sewerage system. There are nearly 500 houses which must decide about the matter by themselves.'' Pedersöre municipality is responsible also for a residential area where wastewater from 14 houses has so far been purified by infiltration.

Last year, however, the system that had served for 12 years started acting up. ''We could have perhaps replaced the system, but it would have been a big job'', Hellund says. A mini biochemical treatment plant was chosen as the new system. WehoPuts 70 met the criteria, including size.

Clean water, clean nature

Contractor Stefan Snellman assumed the responsibility for digging work, and, as a dealer for WehoPuts, he also gave advice in the installation of the treatment plant. ‘‘The place was the best possible, dry enough. It was easy to install’’, Snellman says. Pipelines left behind by the infiltration system were in readiness. The gravity sewer went so deep, though, that a decision was made to install a pumping station in front of the treatment plant. Those few days of work were finished in early summer, and the treatment plant was immediately put to use. Snellman has kept an eye on the operations to ensure their smoothness during the initial stages. Good news welled up in an open ditch 50 metres from the treatment plant. ‘‘Very clean water, indeed.’’

A treatment plant as a shared project

Address

Uponor UK
The Pavilion, Blackmoor Lane,
Watford, WD18 8GA

Phone 01923 381212
E-Mail
customerservice.uk.bfs@georgfischer.com
W www.uponor.com