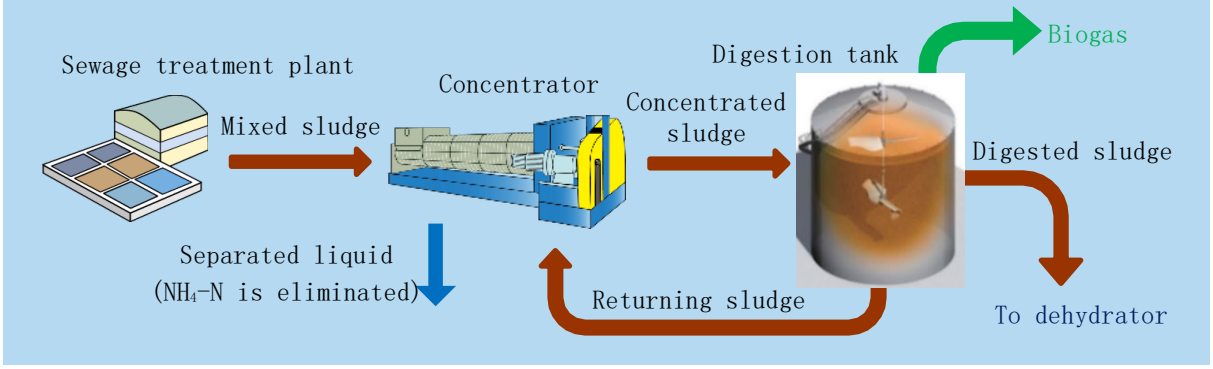
High-concentration digestion system

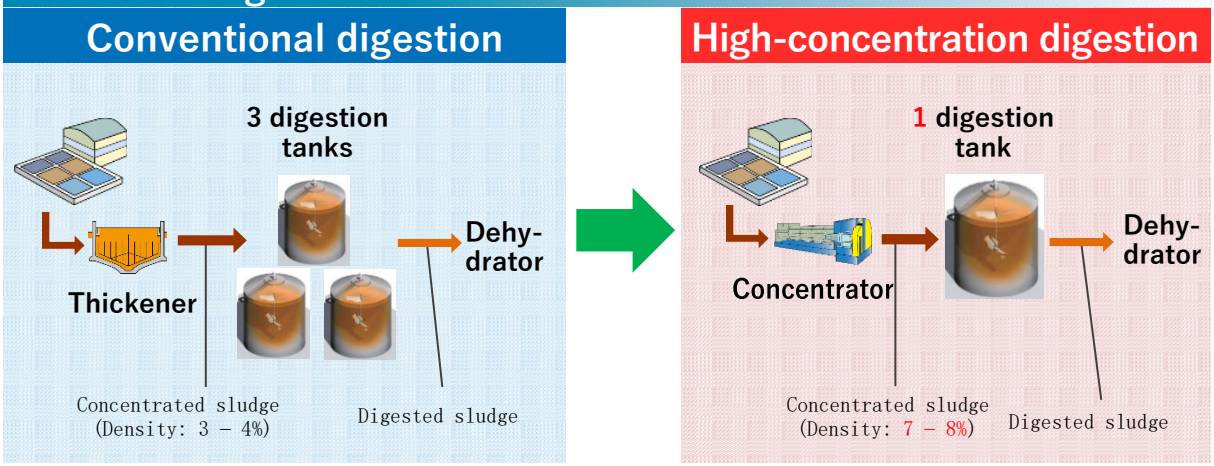
Concentrating sludge in order to realize a more compact digester

By concentrating the density of sludge to be processed in a digester tank to around 8%, the system allows for significant reductions in tank capacity as well as construction costs.

Overview of high-concentration digestion system



The advantages of the new method



Features

- **Concentrates the density of sludge to be processed in the digestion tank**
  Significantly reduces necessary tank capacity (as illustrated above)
- **Removes ammonium nitrogen**
  Maintains robust digestion performance by removing ammonia, which inhibits digestion, in the course of the concentration process
- **Low power requirement due to the cut in the volume of sludge transferred and thus less need for hot water circulation pumps as the system operates with fewer digestion tanks**
- **The number of digestion tank and sludge storage tank stirrers is also lower**

Verification Testing

- **Conducted a research project commissioned by the National Institute for Land and Infrastructure Management, with the system being studied under the 2018 B-DASH Project**