Outline of the joint research concerning high-speed nitrogen removal from thickener effluent by using anaerobic ammonia-oxidizing

The City of Yokohama has introduced advanced sewage sludge treatment to remove nitrogen and phosphorus, with a view to improving the city's water environment including the marine area. It has built a facility for specifically treating centrate which is generated in the process of sewage sludge treatment. Since the centrate contains, however, highly condensed nitrogen and phosphorus, the treatment of them requires a lot of time and energy, imposing a heavy burden on the waste water treatment plants in the city.

For this research, an experimental plant was set up in the Hokubu Sludge Treatment Center to carry out an experiment using useful bacteria that can effectively remove nitrogen, with a view to utilizing the technology in the field of sewerage. At the same time, the technology will be studied to adapt to Yokohama's facilities to treat centrate so that the city's water environment will be improved.