Project for improving the water quality from the wastewater treatment facility and its operation in fishery processing factories

Ministry of the Environment

Implementation systems

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Background

- Fishery processing production is rising recently in Da Nang.
- Wastewater from fishery processing factories is treated at the wastewater treatment center in Tho Quang Industrial Park, and then discharged into the nearby port where water is almost enclosed.
- Water quality of the port has been getting worse in late years, and livings and activities of local people are affected by water quality decline and bad smell.
- Each factory treats wastewater using own treatment facility, and discharges it to the wastewater treatment center over the capacity, consequently deteriorating the sea water.

Project Outline

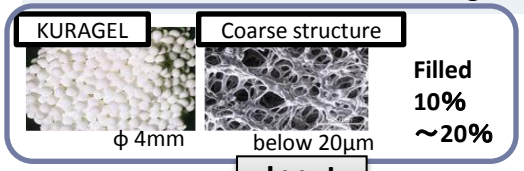
- The objective is to improve the water quality, reduce the sludge and enhance human capacity in operation & maintenance of wastewater treatment facility in fishery processing factories in Da Nang by introducing treatment technology and management of Japanese company.
- Feasibility study (FS) in YR2014 of the project is as below:
  - ・Quality test of wastewater from fishery processing factories and the wastewater treatment center,
  - ・Survey of present conditions of water usage and sludge in each processing process,
  - ・Coordination with the departments and companies concerned,
  - ・Survey of wastewater treatment cost in fishery processing factories, and
  - ・Study of business models.

Location

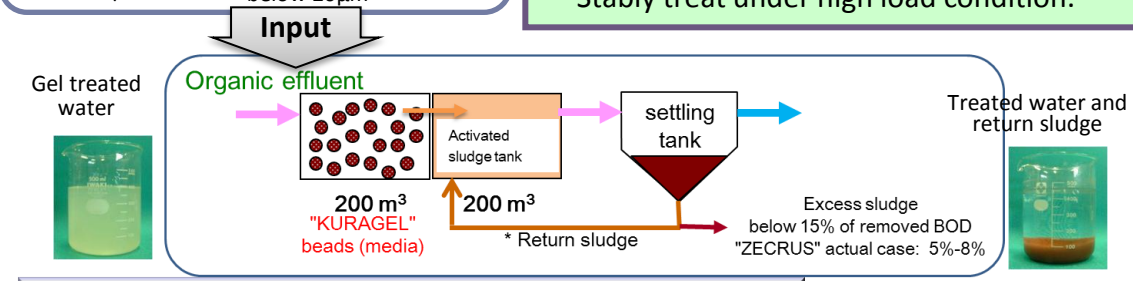
Da Nang, Vietnam

Outline of Technology

◆ KURAGEL is made from a high bioaffinity PVA (Polyvinyl alcohol) and keeps a billion of bacteria per a grain, which perform self-digestion acceleration. Therefore, KURAGEL is able to decompose BOD component of wastewater by approx. 90% under aerobic condition, resulting in drastically reduction of excess sludge.



Compare PVA gel with conventional carrier :
- Stably sustain bacteria inside gel,
- Highly react to load variation,
- Stably treat under high load condition.



Expected results and business prospects

- Expected effect : The ability of wastewater treatment in fishery processing factory is developed, the water quality in the bay where wastewater inflows is improved.
- Summary of business model : A package of technologies on hardware associated with software like operation and maintenance possibly develop a business deployment of environmental monitoring and water quality analysis.