

Small-Scaled Sewage Treatment Method Using POD Concept in Cambodia

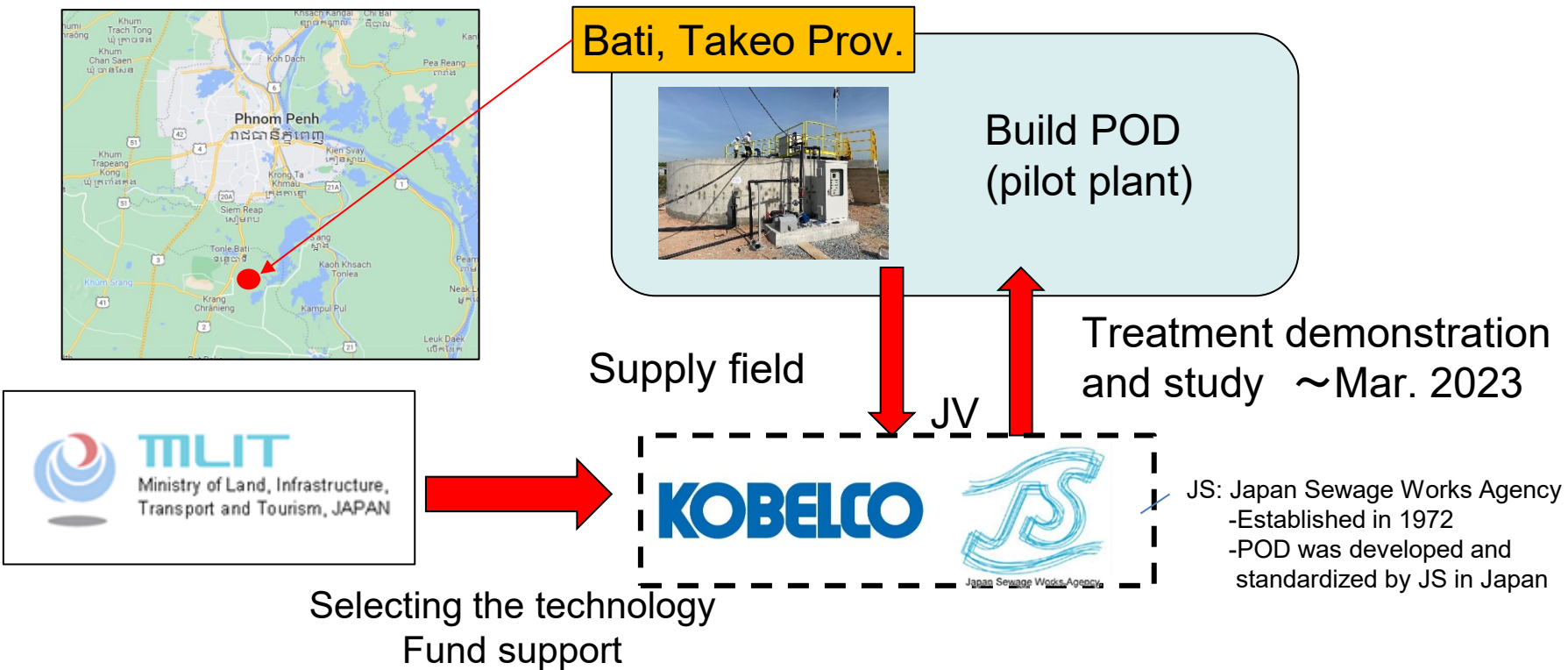
**KOBELCO ECO-SOLUTIONS
JAPAN SEWAGE WORKS AGENCY**

1. Scheme of WOW TO JAPAN 2022 (Follow up 2023)

Demonstration project of small scaled sewage treatment using POD concept

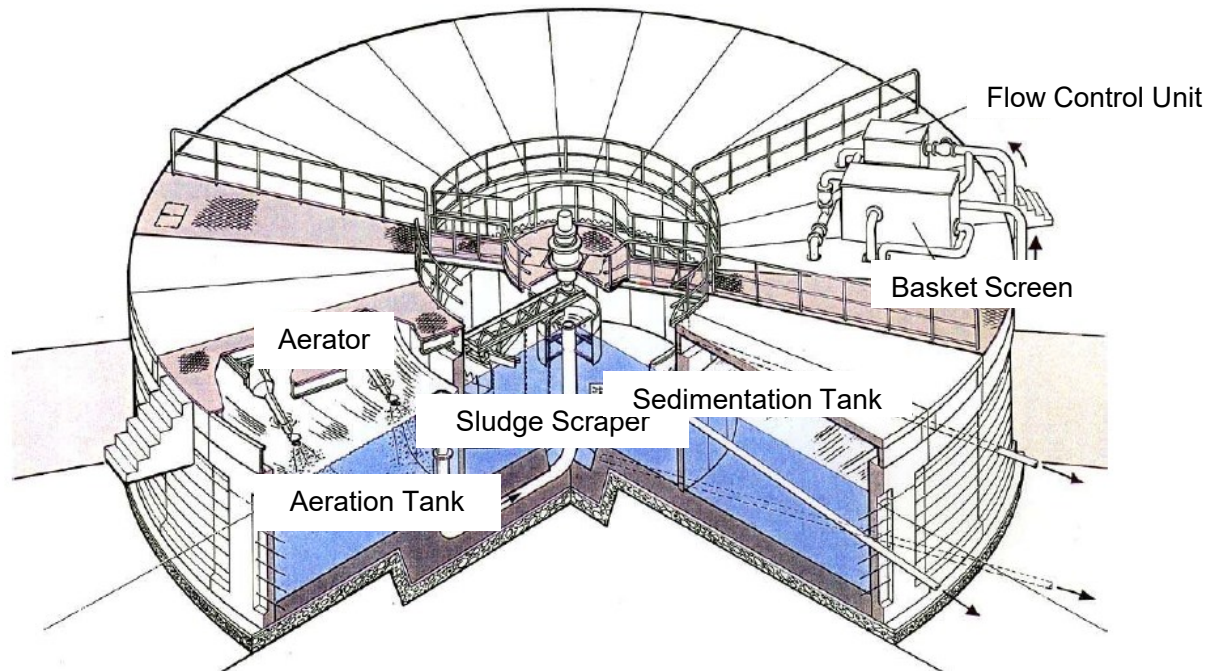
Since small communities are scattered over a large area in rural Cambodia, decentralized sewage treatment plant development will be necessary as same as water supply in the future

And by utilizing MLIT's Wow to Japan, we conduct the demonstration of POD technology, and study for localization, treatment effectiveness and cost study etc.



2. Sewage Treatment Method Using POD Concept

- POD stands for “Prefabricated Oxidation Ditch”
- POD is a packaged system consisting of reaction tank (activated sludge treatment) and final sedimentation tank.
- Standard design for 300m³/d, 500m³/d, 800m³/d and 1,200m³/d



- Saves design labor and construction period by packaged system
- Stable treatment of T-N and T-P
- Easy maintenance

3. Sewage Treatment Method Using POD Concept

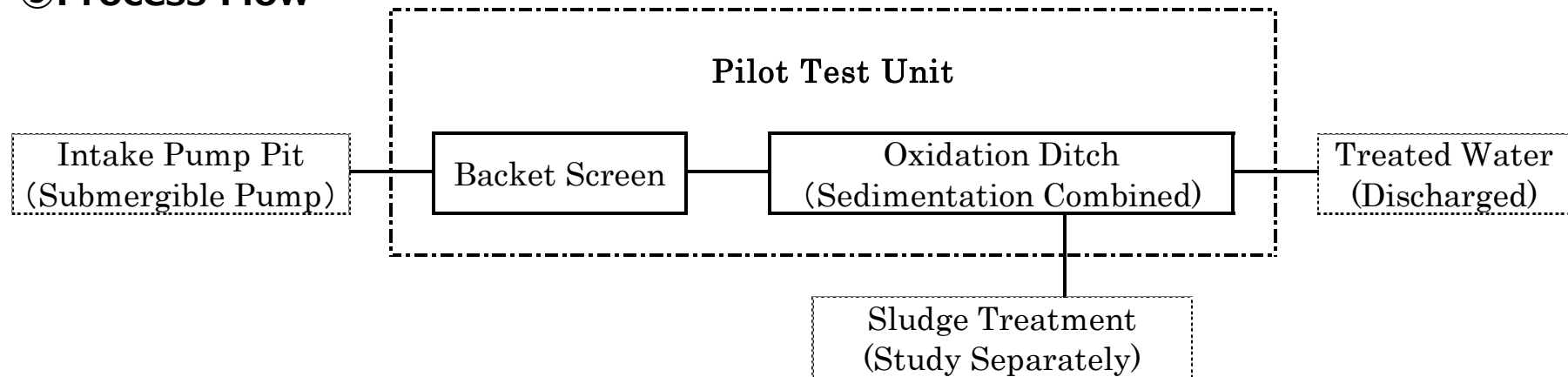
【 Pilot Test Plant Design Condition】

①Capacity : 100m³/day

②Water Quality

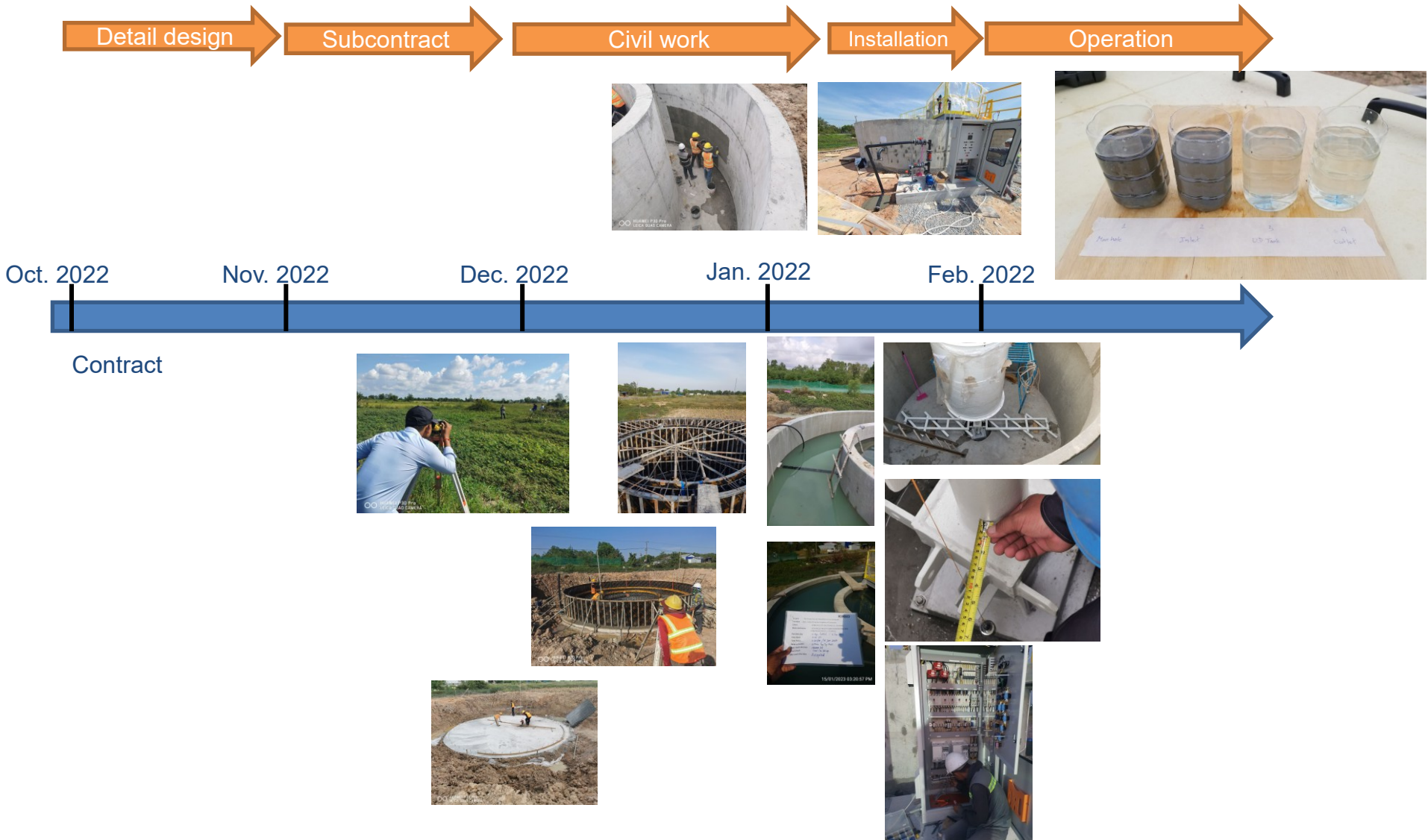
	Raw Water	→	Treated Water(As per Cambodia Standard※)
SS	: 160mg/L	→	50mg/L
BOD	: 200mg/L	→	30mg/L
T-N	: 50mg/L	→	20mg/L

③Process Flow



※Applied Sub-decree103 Annex2 Category 1

4. Result of Pilot Test at Takeo



5. Result of Pilot Test at Takeo



Intake Pump Pit



Measurement Tank



Discharge to Chanel



Sedimentation Tank



Overview of POD



Aerator