

Various Application of Semi-aerobic Landfill "Fukuoka Method"

- The Roles of Consultant -



Dec 2nd, 2023

Ĺ≣

Our Company





Eight-Japan Engineering Consultants Inc. (EJEC)

- Civil Engineering Consulting Firm
- 68 years history with over 1,000 staff
- Wide range of services
- Strong capability for Waste Management



Waste Management Expert



1) Apply to Existing Landfill Rehabilitation in Palau



<u>Project Name:</u> The Project for Improvement of Solid Waste Management <u>Project Period</u>: 2005 – 2008 Project Scheme - Technical Connection Project funded by UCA

<u>Project Scheme</u> : Technical Cooperation Project funded by JICA (support to Nippon Koei Co., Ltd.)

Scope of work undertaken by EJEC :

n Koei Co., Ltd.)

Preparatory Survey, Rehabilitation planning (partially install semi-aerobic structure),

Advisory for implementation

- Apply to Existing landfill
- Technology transfer/ Capacity building
- Construction work by Local contractor







2) Apply to National Landfill Construction in Palau



<u>Project Name</u>: The Project for the Construction of National Landfill <u>Project Period</u>: 2018 – 2020 <u>Project Scheme</u>: Grant Project funded by Government of Japan (Joint Venture with CTI Engineering International Co., Ltd.) <u>Scope of Work undertaken by EJEC</u>:

Preparatory Survey, Detailed Design, Supervision of Construction

Continue to apply for new landfill too

ICA

- Same contractor with previous one
- Made manual for maintenance







3) Apply to New Landfill Construction in Thailand



<u>Project Name</u>: The project for expansion of the solid waste disposal center in Tak province **Project Period : 2016** Project Scheme : Grant Assistance for Grassroots Human Security Project funded by Ministry of Foreign Affairs, Japan COERR TOWARDS A BETTER WORLD Scope of Work undertaken by EJEC : Technical advisory for Design and Supervision of Construction

JAPANGOV



- Operate by Local NGO
- Construction by Local contractor
- Technology transfer to Local NGO, Our local staff, Local contractor







[Discussion on Design]



4) Apply to New Landfill Construction in Thailand











Contribution to proper installation of Fukuoka-method in the countries

• Proper design and construction supervision (advice and quality control during the construction)

Contribution to proper understanding of the superiority of the Fukuoka method

 Superiority for solving many problems for the landfill operators (Low-technology, fire prevention, odor reduction, early stabilization, early leachate water quality improvement, methane emission reduction, etc.)

Contribution of technology transfer/capacity building to local people

- Proper understanding by the local consultant or contractor on the Fukuoka-method philosophy
- Proper operation & maintenance of Fukuoka-method landfill

Local consultants and contractors' correct understanding





Eight-Japan Engineering Consultants Inc. International Department

Cynthia MALAVA (malava-cyn@ej-hds.co.jp) Taisuke ODERA (oodera-ta@ej-hds.co.jp)

5-33-11, Honcho, Nakano-ku, Tokyo 164-0012 Japan Tel: +81-3-5341-5158

http://www.ejec.ej-hds.co.jp/en/