

ACE Paper 4/2010 For advice on 8 February 2010

Report of the Environmental Impact Assessment Subcommittee

INTRODUCTION

The Environmental Impact Assessment (EIA) Subcommittee considered the EIA report on "Organic Waste Treatment Facilities, Phase I" (OWTF) submitted by the Infrastructure Planning Group of the Environmental Protection Department (EPD) by circulation (ACE-EIA Paper 13/2009 refers).

ADVICE SOUGHT

2. Members are requested to consider the views of the Subcommittee and advise on the EIA report.

THE PROJECT

Need for the project

3. "A Policy Framework for the Management of Municipal Solid Waste in Hong Kong (2005-2014)" published in December 2005 suggested, amongst other measures, the implementation of biological treatment facilities to treat source-separated biodegradable organic waste from the commercial and industrial establishments so as to turn them into useful products and to reduce landfill disposal. The proposed OWTF can mitigate landfill space depletion, reduce leachate and landfill gas generation. Through the organic waste treatment process, valuable products such as composts and biogas can be generated.

Description of the project

- 4. The project (as shown in the attached **Figure**) is for construction and operation of the OWTF at Siu Ho Wan on Lantau Island. The project includes the following components
 - (i) Pre-treatment facilities The incoming waste will be delivered by enclosed waste vehicles to the enclosed waste reception area and pre-treated using a trommel screen, overhead magnets and shredder, etc.
 - (ii) Anaerobic digestion process The pre-treated material will be fed into the buffer tanks to start the hydrolysis stage of the anaerobic digestion.
 - (iii) Post-treatment of digestate After digestion, the material from digesters will be pumped to dewatering facility and further treated by tunnel composting.
 - (iv) Energy recovery system Cogeneration Units will be employed to convert the energy contained in the biogas to electricity and heat. A stand-by flare will be installed in the project site only for emergency use; and
 - (v) Air and wastewater treatment facilities A centralized air pollution control unit will be provided to treat the vented air and to control odour emission.
 All the wastewater generated from the project will be properly treated by the wastewater treatment unit before discharge.
- 5. The project is classified as a designated project under Item G.4, Part I, Schedule 2 of the EIA Ordinance: "A waste disposal facility (excluding any refuse collection point), or waste disposal activity, for (a) refuse; or (b) chemical, industrial or special wastes." The project is designed at a capacity of handling 200 tonnes of organic waste each day.

Consideration of alternative options

6. The project proponent has identified a number of potential sites for the project. They include Sha Ling Livestock Waste Composting Plant in Sheung Shui, EcoPark Phase II in Tuen Mun, Siu Ho Wan in North Lantau and Tseung Kwan O Area 137.

7. The proposed site in Siu Ho Wan is considered suitable for the project because (i) there is no residential development in the vicinity, (ii) the land use is in line with the planning intention, (iii) infrastructure facilities (i.e. potential users of electricity generated from the project) are found in the vicinity, and (iv) the site is accessible via Cheung Tung Road and Sham Fung Road adjacent to the North Lantau Highway.

VIEWS OF THE SUBCOMMITTEE

8. Members noted that the public inspection period of the EIA report was from 29 December 2009 to 27 January 2010. No public comment was received by the EPD during the public inspection period. The written response of the project proponent to some Members' questions and comments was circulated to Subcommittee Members for information before the scheduled meeting date. Having considered the EIA report and information provided by the project proponent, the Subcommittee agreed that the EIA report could be considered by circulation and there was no need to invite the project proponent to attend the Subcommittee meeting.

RECOMMENDATION OF THE SUBCOMMITTEE

- 9. Having regard to the findings and recommendations of the EIA report and information provided by the project proponent, the Subcommittee agreed by circulation to recommend to the full Council that the EIA report could be endorsed with the following proposed conditions
 - (a) the project proponent should implement appropriate source separation measures to ensure that the waste delivered to the plant is suitable for the intended treatment processing; and
 - (b) the project proponent should make proper arrangements to ensure that the compost produced will be used beneficially and will not end up in the landfills.

EIA Subcommittee Secretariat January 2010