

For information

Legislative Council Panel on Environmental Affairs

Supplementary Information on 233DS – Sludge Treatment Facilities

INTRODUCTION

After considering **233DS** “Sludge Treatment Facilities” at the Environmental Affairs Panel meeting held on 30 March 2009, Members requested the Administration to provide supplementary information on –

- (a) Emission standards to be adopted for sludge treatment facilities (STF) and the factors to be taken into account in setting the standards;
- (b) Outcome of discussion of the working group on the planning and development of Tuen Mun led by the Environment Bureau; and
- (c) The arrangements for the marine transport of sludge for treatment at STF

THE ADMINISTRATION’S RESPONSE

Emission standards to be adopted for STF

2. In the Environmental Impact Assessment (EIA) study, we reviewed and compared relevant overseas emission standards. The EIA report concluded that the STF should adopt the most stringent target emission standards which are equivalent to the European Union Standards. A comparison of STF emission standards with other international standards is shown in Enclosure 1.

Outcome of discussion of the working group on the planning and development of Tuen Mun

3. The first Tuen Mun Development Liaison Working Group meeting was held on 27 March 2009. In the meeting, Tuen Mun District Council (TMDC) representatives presented a list of proposals for improving Tuen Mun's image and development for the Administration's consideration. The Administration will continue to work together with TMDC to assess the feasibility of the proposals with a view to taking forward measures to enhance the further development of the district. The Administration will provide preliminary assessments of the proposals in the second Working Group meeting. We will keep the Environmental Affairs Panel informed of the outcome of future discussions with the TMDC.

The arrangements for the marine transport of sludge for treatment at STF

4. More than 70% of sludge will be delivered in sealed containers by marine transport to the STF. It is estimated that, upon full commissioning of the STF, there will only be about two vessels delivering sludge (about 1,400 tonnes per day) to the STF everyday.

Environmental Protection Department
April 2009

Enclosure 1

Comparison of STF emission standards with other international standards

Air pollutant	STF Target Emission Limits (mg/m ³)		Hong Kong's Emission Limits in BPM for Municipal Waste Incineration (mg/m ³)		European Union's Emission Limits in EC's Waste Incineration Directive (mg/m ³)		United States of America's Emission Limits in Title 40 Part 503 of CFR on Sewage sludge Incineration (mg/m ³)
	Daily	Half-hourly	Daily	Half-hourly	Daily	Half-hourly	
Particulates	10	30	10	30	10	30	-
Organic compounds	10	20	10	20	10	20	50.9 ⁽¹⁾ (calculated as methane, monthly average)
Hydrogen chloride (HCl)	10	60	10	60	10	60	-
Hydrogen fluoride (HF)	1	4	1	4	1	4	-
Sulphur dioxide (SO ₂)	50	200	50	200	50	200	-
Carbon monoxide (CO)	50	100	50	100	50	100	89.0 ⁽¹⁾ (monthly average)
Nitrogen dioxide (NO ₂)	200	400	200	400	200	400	-
Mercury	0.05	-	0.05	-	0.05	-	0.87 ⁽¹⁾ (daily average)
Total Cadmium & Thallium	0.05	-	0.05	-	0.05	-	-
Total Heavy Metals	0.5	-	0.5	-	0.5	-	-
Dioxins & furans	1 x 10 ⁻⁷	-	1 x 10 ⁻⁷	-	1 x 10 ⁻⁷	-	-

Note:

(1) Calculated based on the STF preliminary design.