

For information

**Legislative Council  
Panel on Environmental Affairs**

**Sewage Services Operating Accounts  
Actual Outturn in 2008-09 and Projected Outturn in 2009-10**

**PURPOSE**

This information note provides Members with an annual summary of Sewage Services Operating Accounts (SSOA).

**BACKGROUND**

2. The Administration would provide annually a summary of SSOA to the Panel on Environmental Affairs (EA Panel) of the Legislative Council (LegCo) for monitoring. This summary covers the actual outturn of SSOA in 2008-09 and its projected outturn in 2009-10. Details are set out in paragraphs 5 to 8 of this information note.

3. In addition to provision of the annual summary, the Administration would also review the schedule of increases in sewage charge (SC) as specified in Sewage Services (Sewage Charge) Regulation and report the review outcome to EA Panel if –

- (a) SSOA show that the 80% cost recovery target for SC has been exceeded or is projected to be exceeded in the following year; or
- (b) the programme of planned major sewage services-related infrastructural projects or other projects will be delayed by more than one year.

The outcome of the review is summarised in paragraphs 9 to 11 of this information note.

4. For further background information on SSOA and the annual summary, Members may refer to the previous annual summary (LC Paper No. CB(1)1681/08-09(01)) issued in May 2009. In summary, in accordance with the “polluter-pays” principle, the Administration

proposed and LegCo agreed in May 2007 and July 2008 respectively to –

- (a) increase the SC rate by ten increments to achieve 80% recovery of the corresponding operating cost in ten years, with the ultimate goal of full cost recovery in the long term. The first of ten SC increments came into force on 1 April 2008; and
- (b) revise the generic chemical oxygen demand (COD) values<sup>1</sup> and the Trade Effluent Surcharge (TES) rates in accordance with the results of an effluent survey with a view to achieving 100% recovery of the corresponding operating cost in 2009-10. The revised TES rates took effect on 1 August 2008.

## **SEWAGE SERVICES OPERATING ACCOUNTS**

5. The actual outturn of SSOA in 2008-09 and the projected outturn in 2009-10 with breakdowns by SC and TES are provided at **Enclosure 1**.

6. The revenue of SSOA comprises SC and TES collected by the Drainage Services Department (DSD). The SC revenue in 2009-10 is projected to increase by \$50.4 million (+9.5%) over the previous financial year primarily due to increase in SC rate from \$1.31/m<sup>3</sup> for 2008-09 to \$1.43/m<sup>3</sup> for 2009-10. On the other hand, we have implemented a set of revised TES rates since 1 August 2008<sup>2</sup>. The aggregate effect of such revision has been reflected in the actual and projected TES revenue accordingly.

7. Comparing with 2008-09, the operating cost in respect of SC incurred by DSD is projected to increase in 2009-10 by \$91.4 million (+8.9%) mainly due to commissioning of the Advance Disinfection Facilities under Harbour Area Treatment Scheme (HATS) Stage 2A in 2009-10. Contrarily, the expenditure under TES is expected to decrease in 2009-10 by \$19.0 million (-8.8%) due to full year effect of adjustment

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<sup>1</sup> COD measures the amount of oxygen required to decompose organic matter chemically and is hence a measure of polluting load. The higher the level in wastewater, the greater the treatment cost is. The generic COD values are specified in Sewage Services (Trade Effluent Surcharge) Regulation.

<sup>2</sup> The TES rates of 13 trades were reduced on 1 August 2008 whereas the rates of 14 trades were increased in either one increment (on 1 August 2008) or two increments (on 1 August 2008 and 1 August 2009).

to the apportioning of SSOA expenditure since 1 August 2008<sup>3</sup>.

8. As regards the estimated cost recovery rates for 2009-10 comparing with that for 2008-09, we expect the rate in respect of SC to stand at 52% despite an increase in operating deficit. On the other hand, the cost recovery rate in respect of TES is expected to increase from 88% to 93%.

## REVIEW ON SCHEDULE OF INCREASES

9. Having regard to the actual and projected outturns of SSOA, we have assessed whether any of the conditions for reviewing the schedule of increases in SC as set out in paragraph 3 have been met this year. In gist –

- (a) It is anticipated that the cost recovery rate in respect of SC will stand at 52% in 2009-10, which is far below the interim target of 80%. In fact, we have indicated in our proposal for revision of TES rates that the cost recovery rate in respect of SC is projected to be just around 70% even in 2017-18, partly as a result of adjustment to the apportioning of SSOA expenditure between SC and TES as mentioned in paragraph 7.
- (b) We have recently conducted an inter-departmental review on the progress of relevant major sewage services-related infrastructural projects and other projects<sup>4</sup>. In addition to 14 projects that may be delayed by more than one year as reported in the previous annual summary, the completion dates of nine other projects may also be delayed by more than one year. Please refer to **Enclosure 2** for the latest positions of all projects.

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<sup>3</sup> With the revision of TES rates beginning from 1 August 2008, the average ratio for apportioning the expenditure of SSOA between SC and TES has also been adjusted from 78:22 to 85:15 since 1 August 2008. Since the adjusted apportionment was only effective in eight months of 2008-09, we expect the expenditure under TES to decrease further in 2009-10 taking into account the full year effect of such arrangement.

<sup>4</sup> Our review is based on 41 public works projects which have been taken into account for formulating the schedule of increases in SC in 2007, with specific attention to the major sewage services-related infrastructural projects, i.e. (i) the Advance Disinfection Facilities under HATS Stage 2A, (ii) Sludge Treatment Facilities and (iii) HATS Stage 2A. A list of these projects was provided to LegCo at Annex C to LC Paper No. CB(1)1435/06-07(02).

10. A review on the schedule of increases in SC was conducted given (b) above. Our conclusion is that it is *not* necessary to propose revisions to the existing schedule of increases at this stage. Specifically –

- (a) The majority of delayed projects are village sewerage projects involving low recurrent expenditure. Their implications to the overall expenditure trend of SSOA should be quite limited.
- (b) In addition, we expect that HATS Stage 2A, which will account for the most significant proportion of projected increase in recurrent expenditure of SSOA over the medium term, is expected to remain on schedule for commissioning by 2014. The Advance Disinfection Facilities under HATS Stage 2A has already commenced operation since late 2009 as scheduled.

The latest trend of projected increase in SSOA expenditure over the medium term is therefore in line with the original projections.

11. Notwithstanding the analysis above, we have all along attached importance to the timely implementation of sewerage projects and exercised our best endeavour to minimise any unnecessary rescheduling of their programmes. However, like many other public works projects, their progress may inevitably be affected by uncertainties such as longer engagement processes with stakeholders and additional time taken for finalising the project alignments before commencing land acquisitions. On the other hand, we have also prioritised resources for implementation of several new sewerage projects with more imminent needs since 2007. They have contributed to our overall progress in sewerage infrastructure development despite none belong to the list of 41 projects.

### **ADVICE SOUGHT**

12. Members are invited to note the content of this information note.

**Environmental Protection Department**  
**Drainage Services Department**  
**June 2010**

**Enclosure 1**

**Sewage Services Operating Accounts  
Actual Outturn in 2008-09 and Projected Outturn in 2009-10**

		<i>( X )</i>		<i>( Y )</i>		<i>( Y ) - ( X )</i>	
		<b>Outturn in 2008-09</b>		<b>Outturn in 2009-10</b>		<b>Variance</b>	
		<i>(Actual)</i>		<i>(Projected)</i>			
		\$ million		\$ million		\$ million	
		<i>SC</i>	<i>TES</i>	<i>SC</i>	<i>TES</i>	<i>SC</i>	<i>TES</i>
<i>( A )</i>	Revenue	531.6	189.5	582.0	184.5	50.4	(5.0)
<i>( B )</i>	Expenditure <sup>#</sup>	1,023.6	216.5	1,115.0	197.5	91.4	(19.0)
<i>( A ) - ( B )</i>	Operating Deficit	(492.0)	(27.0)	(533.0)	(13.0)	(41.0)	14.0
<i>( A ) / ( B )</i>	Cost Recovery Rate	52%	88%	52%	93%	0% point	5% point

# Excluding depreciation

## Enclosure 2

### **Latest programme of 41 sewage services-related infrastructure projects and other projects**

<b>PWP Item No.</b>	<b>Project title</b>	<b>Original completion date</b>	<b>Latest programme (May 2010)</b>	<b>Remarks</b>
1	<b>211DS</b> Outlying Islands sewerage, stage 1 phase 2 – upgrading of Peng Chau sewage treatment works	2007-08	Completed in March 2008	N/A
2	<b>229DS</b> North District and Tolo Harbour sewerage, sewage treatment and disposal – high priority works – expansion of Shek Wu Hui sewage treatment works and Ting Kok Road pumping station No. 5	2008-09	Completed in February 2009	N/A
3	<b>215DS</b> Yuen Long and Kam Tin sewerage and sewage disposal – Kam Tin trunk sewerage, phase 1 and Au Tau trunk sewers	2009-10	Completed in February 2010	N/A
4	<b>222DS</b> Tai Po sewage treatment works, stage 5 phase 1	2009-10	Completed in February 2010	N/A
5	<b>352DS</b> Harbour Area Treatment Scheme, stage 2A – construction of advance disinfection facilities at Stonecutters Island sewage treatment works	2009-10	Completed in October 2009	N/A
6	<b>347DS</b> Port Shelter sewerage, stage 3 – Sai Kung Area 4 sewerage	2009-10	Completed in May 2010	N/A

<b>PWP Item No.</b>	<b>Project title</b>	<b>Original completion date</b>	<b>Latest programme (May 2010)</b>	<b>Remarks</b>
7	<b>52DS</b> Ting Kau sewerage, stage 2	2009-10	Completed in September 2009	N/A
8	<b>126DS</b> Sham Tseng sewerage, stage 3	2009-10	Completed in September 2009	N/A
9	<b>230DS</b> Outlying Islands sewerage, stage 1 phase 1 part 2 – Yung Shue Wan sewerage, sewage treatment works and outfall	2010-11	Revised to 2013-14	Longer time has been taken for re-tendering and to seek Finance Committee (FC)'s approval to increase the Approved Project Estimate (APE).
10	<b>234DS</b> Outlying Islands sewerage, stage 1 phase 2 – Sok Kwu Wan sewage collection, treatment and disposal facilities	2010-11	Revised to 2013-14	Longer time has been taken for re-tendering and to seek FC's approval to increase the APE.
11	<b>350DS</b> Yuen Long and Kam Tin sewerage and sewage disposal – consultants' fees and investigations	2010-11	Revised to 2012-13	More time is needed to further consult the local communities and to lobby for their support.
12	<b>338DS</b> Improvement and upgrading of the sewerage systems in Shatin / Ma On Shan New Town	2010-11	On schedule	N/A
13	<b>233DS</b> Sludge treatment facilities	2010-11	Revised to 2013-14	More time is required for completing the EIA Study and public consultation and carrying out tendering and construction work.
14	<b>237DS</b> Tai Po Tai Wo Road sewage pumping station and rising mains	2011-12	On schedule	N/A

<b>PWP Item No.</b>	<b>Project title</b>	<b>Original completion date</b>	<b>Latest programme (May 2010)</b>	<b>Remarks</b>
15	<b>329DS</b> Upgrading of Pillar Point sewage treatment works	2011-12	Revised to 2013-14	Longer time has been taken in the tendering stage and to seek FC's approval to increase the APE.
16	<b>342DS</b> Tai Po sewage treatment works, stage 5 phase 2A – disinfection	2011-12	Completed in March 2010	N/A
17	<b>343DS</b> Outlying Islands sewerage, stage 2 – Peng Chau village sewerage phase 2	2011-12	Tentatively revised to 2014-15	More time is required to further consult the local communities and negotiate / finalise the project alignments before commencing land acquisition.
18	<b>348DS</b> North District and Tolo Harbour sewerage, sewage treatment and disposal – regional sewerage works, part 1 – sewerage upgrade	2011-12	Revised to 2013-14	The programme was extended in view of the complex interface of the proposed works with the existing system and the need to minimise traffic impact.
19	<b>235DS</b> Yuen Long and Kam Tin sewerage and sewage disposal <sup>1</sup>	2012-13	Tentatively revised to 2016-17	More time is needed to further consult the local communities and to lobby for their support.
20	<b>339DS</b> North District sewerage, stage 1 phase 2C and stage 2 phase 1 <sup>2</sup>	2012-13	Tentatively revised to 2018-19	More time is required to further consult the local communities and lobby for their support and negotiate / finalise the project alignments before commencing land acquisition.
21	<b>344DS</b> Upgrading of Central and East Kowloon sewerage <sup>3</sup>	2012-13	Tentatively revised to 2015-16	N/A



<b>PWP Item No.</b>	<b>Project title</b>	<b>Original completion date</b>	<b>Latest programme (May 2010)</b>	<b>Remarks</b>
22	<b>157DS</b> Yuen Long and Kam Tin sewerage, stage 2 phase 3B, 3C, 3D, 4B, 4C, 5A, 5B, 5C, 5D and 5E	2013-14	Tentatively revised to 2016-17	More time is required to further consult the local communities and lobby for their support.
23	<b>160DS</b> Tuen Mun sewerage, stage 1	2013-14	Tentatively revised to 2017-18	More time is required to further consult the local communities and lobby for their support and negotiate / finalise the project alignments before commencing land acquisition.
24	<b>181DS</b> Tuen Mun sewerage, stage 2	2013-14	Tentatively revised to 2017-18	More time is required to further consult the local communities and lobby for their support and negotiate / finalise the project alignments before commencing land acquisition.
25	<b>274DS</b> Yuen Long and Kam Tin sewerage, stage 3 <sup>4</sup>	2013-14	Tentatively revised to 2017-18	More time is required to further consult the local communities and lobby for their support.
26	<b>236DS</b> Tai Po sewage treatment works, stage 5 phase 2B	2013-14	On schedule	N/A
27	<b>353DS</b> Outlying Island sewerage, stage 2 – upgrading of Mui Wo Village sewerage phase 2 and Mui Wo sewage treatment works <sup>5</sup>	2013-14	Tentatively revised to 2016-17	More time is required to further consult the local communities and lobby for their support and negotiate / finalise the project alignments before commencing land acquisition.
28	<b>358DS</b> Sewerage to Chuen Lung Village, Kau Wa Keng Old Village and Lo Wai	2013-14	Tentatively on schedule	N/A

<b>PWP Item No.</b>	<b>Project title</b>	<b>Original completion date</b>	<b>Latest programme (May 2010)</b>	<b>Remarks</b>
29	<b>332DS</b> Lam Tsuen Valley sewerage <sup>6</sup>	2013-14	Tentatively revised to 2016-17	More time is required to negotiate / finalise the project alignments before commencing land acquisition.
30	<b>346DS</b> Upgrading of Tuen Mun sewerage, phase 1 <sup>7</sup>	2013-14	Tentatively revised to 2017-18	More time is required to further consult the local communities and lobby for their support and negotiate / finalise the project alignments before commencing land acquisition.
31	<b>226DS</b> Sai Kung sewage treatment works, phase 2 upgrading	2013-14	Tentatively revised to 2015-16	The project programme is under review to align with other village sewerage projects in Port Shelter.
32	<b>354DS</b> Outlying Islands sewerage, stage 2 – upgrading of Cheung Chau and Tai O sewage collection, treatment and disposal facilities <sup>5</sup>	2013-14	Tentatively revised to 2017-18	More time is required to negotiate / finalise the project alignments before commencing land acquisition. The scope of the project has also been revised to adopt a higher level of treatment for the sewage treatment works.
33	<b>355DS</b> Outlying Islands sewerage, stage 2 – Lamma Village sewerage phase 2 <sup>5</sup>	2013-14	Tentatively revised to 2014-15	N/A
34	<b>125DS</b> Tolo Harbour sewerage of unsewered areas, stage 2 <sup>8</sup>	2014-15	Tentatively revised to 2017-18	More time is required to negotiate / finalise the project alignments before commencing land acquisition.
35	<b>337DS</b> Upgrading of Central and East Kowloon sewerage – packages 2 and 3 <sup>3</sup>	2014-15	N/A	N/A

<b>PWP Item No.</b>	<b>Project title</b>	<b>Original completion date</b>	<b>Latest programme (May 2010)</b>	<b>Remarks</b>
36	<b>341DS</b> Harbour Area Treatment Scheme, stage 2A – upgrading of Stonecutters Island sewage treatment works and preliminary treatment works <sup>9</sup>	2014-15	On schedule	N/A
37	<b>272DS</b> Port Shelter sewerage, stage 2	2014-15	Tentatively revised to 2016-17	More time is required to further consult the local communities and lobby for their support.
38	<b>273DS</b> Port Shelter sewerage, stage 3	2014-15	Tentatively revised to 2016-17	More time is required to further consult the local communities and lobby for their support.
39	<b>345DS</b> North District sewerage, stage 2 part 2A	2015-16	Tentatively revised to 2017-18	More time is required to further consult the local communities and lobby for their support.
40	<b>223DS</b> Yuen Long and Kam Tin sewerage treatment upgrade – upgrading of San Wai sewage treatment works	2015-16	Tentatively on schedule	N/A
41	<b>203DS</b> North District sewerage, stage 2 part 2B	2015-16	Tentatively on schedule	N/A

## Footnote

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- 1 The project **235DS** was part-upgraded as **368DS** “Yuen Long South sewerage and expansion of Ha Tsuen sewage pumping station” in May 2009.
- 2 The stage 1 phase 2B works under the original **339DS** “North District sewerage, stage 1 phase 2C and stage 2 phase 1” was part-upgraded as **359DS** “North District sewerage, stage 1 phase 2B” in January 2007, while another part was upgraded as **366DS** “Kau Lung Hang sewerage – trunk sewers, pumping station and rising mains” in January 2009.
- 3 The project **344DS** “Upgrading of Central and East Kowloon sewerage – package 1” was combined with **337DS** “Upgrading of Central and East Kowloon sewerage – packages 2 and 3” and **356DS** “Upgrading of Central and East Kowloon sewerage – package 4” to form a new item with the same PWP Item No. **344DS** covering the packages 1 to 4 of upgrading of Central and East Kowloon sewerage. The original overall completion date of the last package was 2014-15 despite **356DS** is not one of the 41 projects mentioned in paragraph 9(b). Upon combining the items above, the works were re-packaged for implementation in two phases. The first phase covering all the critical works items from the original **344DS** was part-upgraded as **367DS** “Upgrading of Central and East Kowloon sewerage – phase 1” in December 2008 for completion by 2012-13, while design of phase 2 is in progress for completion by 2015-16.
- 4 The project **274DS** was part-upgraded as **370DS** “Village sewerage at Wang Chau of Yuen Long” in June 2009.
- 5 The projects **353DS**, **354DS** and **355DS** were split from **331DS** “Outlying Islands sewerage, stage 2”.
- 6 The project **332DS** was part-upgraded as **364DS** “Lam Tsuen Valley sewerage – trunk sewers, pumping station and rising mains” in November 2008.
- 7 The project **346DS** was part-upgraded as **360DS** “Sewerage at Tseng Tau Chung Tsuen, Tuen Mun” in November 2007 while another part was upgraded as **371DS** “Sewerage in western Tuen Mun” in July 2009.
- 8 The project **125DS** was part-upgraded as **365DS** “Tolo Harbour sewerage of unsewered areas, stage 1 phase 2C” in November 2008.
- 9 The project **341DS** was part-upgraded as **369DS** “Harbour Area Treatment Scheme, stage 2A – construction of the sewage conveyance system and advance works for upgrading of Stonecutters Island sewage treatment works” in June 2009, while the remaining part of **341DS** was also upgraded to Category A in April 2010. Both parts are on schedule for completion by 2014-15.