

LEGISLATIVE COUNCIL BRIEF

Sewage Services Ordinance (Chapter 463)

SEWAGE SERVICES (TRADE EFFLUENT SURCHARGE) (AMENDMENT) REGULATION 2008

INTRODUCTION

At the meeting of the Executive Council on 6 May 2008, the Council ADVISED and the Chief Executive ORDERED that –

- (a) pursuant to section 12 of the Sewage Services Ordinance (Cap 463), the Sewage Services (Trade Effluent Surcharge) (Amendment) Regulation 2008 (the Amendment Regulation), at Annex A, should be made to revise the chemical oxygen demand (COD) values and the trade effluent surcharge (TES) rates in accordance with the results of the effluent survey with a view to achieving 100% operating cost recovery (i.e. excluding depreciation) for the TES by 2009-10;
- (b) the allocation of sewage services operating expenditure to the sewage charge (SC) and TES be adjusted from 78% and 22% to 85% and 15% respectively in accordance with revised pollution loads of the two sectors as a result of the proposed new COD values of the TES trades; and
- (c) notwithstanding that partly as a result of (b) above the projected operating cost recovery rate for the SC will be reduced from the original target of 80% to around 70% after the 10-year increment scheme approved by the Legislative Council (LegCo) in May 2007, the approved SC increment scheme should be kept intact for the time being.

JUSTIFICATIONS

2. Members of the LegCo and the community in general support applying the polluter-pays principle to the provision of sewage services to facilitate the long-term sustainability of our environment. In May 2007 LegCo Members supported our proposal to increase the sewage charge by ten increments to achieve 80% operating cost recovery in ten years' time, with the ultimate goal of full cost recovery in the long term.
3. We undertook to review the effluent quality of all the trades under the

TES scheme with a view to adjusting the generic COD¹ values and TES rates in view of the target of full recovery of attributable operating cost. We completed the review at the end of 2007.

The effluent survey and key findings

4. At present, there are 30 trades under the TES scheme. The Environmental Protection Department (EPD) and the Hong Kong Productivity Council (HKPC) conducted the survey in two phases. In the first phase EPD surveyed the effluents of four trades involving the majority of the TES accounts. In the second phase HKPC was commissioned as an independent consultant to survey the effluents of the remaining 26 trades. During the survey, trade associations and individual operators were approached and consulted.

5. The survey confirmed that effluent characteristics vary widely among the trades and the strength depends on the product types, the ingredients or chemicals and equipment used, the manufacturing practices, and the performance of sewage treatment facilities (if any). The detailed findings of the effluent characteristics are given in Annex B. In summary, the key findings of the survey are –

- (a) the COD_{total}² values obtained from nine of the TES trades are stronger than the currently prescribed values;
- (b) the COD_{total} values obtained from 18 of the TES trades are not stronger than the currently prescribed values; and
- (c) among the 18 trades noted in sub-paragraph (b) above, the effluent strengths in terms of COD_{total} of three trades are not stronger than domestic sewage.

6. We were not able to collect from three TES trades samples which are representative of these trades because the surveyed operators were found to be not operating the typical production processes. The three trades are “Spinning cotton”, “Paints, varnishes and lacquers” and “Pulp, paper and paperboard”. The surveyed premises could not therefore yield data suitable for revising the COD values. We therefore propose maintaining the prescribed COD values as there is no basis for revising them.

7. The proposed revised generic COD values are set out in Section 6 of the Amendment Regulation, as at Annex A. The maximum value for any one trade is 2,000 grammes per cubic metre. This arises from the nature of the discharge licensing scheme provided for under the Water Pollution Control Ordinance (Cap 358). It is the effluent strength most categories of operators may be licensed to discharge into the sewerage according to the Technical Memorandum on Standards for Effluents

¹ 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 cost of treating it.

² The value is a measurement of the chemical oxygen demand of the whole sample of a trade effluent without allowing gravity separation of the sample, thus indicating the total organic load.

Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters, which governs the said licensing scheme.

Recalculated TES rates

8. Based on the results of the effluent surveys and assuming a maximum effluent COD value of 2,000 grammes per cubic metre, we have recalculated the pollution loadings of the TES trades and the apportionment of costs between the SC and the TES. To further enhance the accuracy and fairness of the calculations, we have treated reassessed accounts separately by using the actual COD values established in the reassessment process to estimate the loads from such accounts, instead of the generic COD values prescribed. After the recalculation, the apportionment of sewage services costs between the SC and the TES has changed from a ratio of 78:22 to one of 85:15. This technical adjustment reflects the overall improvements in effluent quality of the TES trades under the sewage services charging scheme. We have calculated the new TES rates based on this revised apportionment.

Implications to the SC

9. Partly as a result of the revised apportionment of sewage services costs between the SC and TES, the projected operating cost recovery rate for the SC will be reduced from the original target of 80% to around 70% after the 10-year increment scheme approved by the LegCo in May 2007. Other factors include the projections of inflation and operating costs. However, we do not propose to review the SC 10-year increment scheme, which should be kept intact for the time being.

Removal of trades from the TES scheme

10. Since three trades, namely “Bleaching and dyeing of garments”, “Textile stencilling and printing”, and “Laundries”, have been found to discharge effluents not stronger than domestic sewage, there is no longer any basis for subjecting them to the TES, which seeks to recover from operators the additional cost incurred in treating effluents more polluting than domestic sewage. The Amendment Regulation will remove them from the scheme entirely.

Reduction in TES rates

11. Concerning the remaining 27 trades in the TES scheme, the Amendment Regulation will reduce the TES rates for 13 trades by one single reduction with effect from 1 August 2008 to reflect the revised COD values and to achieve full recovery of the attributable operating costs.

12. Of the 13 trades mentioned in paragraph 11 above, the generic COD values of 12 trades have to be adjusted downwards to reflect the finding that the effluents from these trades have become less polluting. The Amendment Regulation will adjust their applicable TES rates as the resultant cost of treating these effluents is reduced. The downward adjustment is in line with our existing policy of achieving full recovery of attributable operating costs.

13. While the effluent of the remaining trade, “Canning & preserving fruit & vegetables”, was found to be slightly stronger than presently prescribed, the difference between its COD_{total} and $COD_{settled}$ (i.e. $COD_{total-settled}$ ³) values (after the application of the 2,000 grammes per cubic metre cap) has decreased. As a result, its TES Rate should be slightly reduced accordingly.

Increases in TES rates

14. The Amendment Regulation will increase the TES rate for one trade (“Canning, preserving and processing of fish and crustaceans”) by one single increment on 1 August 2008 and for 13 trades by two consecutive increments on 1 August 2008 and 1 August 2009 to reflect the revised COD values on the premise of recovering full attributable operating cost by 2009-10. The cumulative TES increments for the majority of these trades will be around 19% to 37%, with one trade at 4,000%.

15. For “Soap and cleaning preparations, perfumes, cosmetic” and “Soy and other sauces” trades, although their COD values have improved, such improvements are not of a scale that justify a reduction in the TES rates in view of the fact that the most recent effluent strengths for the two trades remain above the 2,000 grammes per cubic metre cap which limits the charge rates. The Amendment Regulation will therefore adjust their applicable TES rates by two increments to recover fully the operating cost after the second increment.

16. Similarly, the Amendment Regulation will increase the TES rate for “Canning, preserving and processing of fish & crustaceans” despite the slight improvement in the COD values of its effluent in order to recover from the trade fully the attributable operating cost. The necessary increase in the applicable TES rate is small and will be made by one increment.

17. Our survey showed that eight other trades have not improved their effluent quality over the years. In fact, their effluents are stronger than currently prescribed under the TES scheme. We propose increasing their TES rates by two increments to achieve full operating cost recovery by 2009-10.

18. For the three trades from which we were not able to collect effluent samples representative of their typical production processes, we propose adjusting upwards by two increments their applicable TES rates to achieve full operating cost recovery by 2009-10. There are 86 accounts under these trades and their effluent load accounts for less than 0.5% of the overall load subject to TES. We would continue to monitor their effluent and initiate adjustments where appropriate.

Other considerations

19. We have been very conscious of the need to control the operating costs

³ The value is derived by subtracting $COD_{settled}$ from COD_{total} , indicating the organic load of the settled portion of the water

of the sewage services and have adopted various measures to improve efficiency, for example streamlining staff structure, outsourcing sewerage maintenance and supporting operations, adopting energy saving technologies and better use of biogas produced in secondary sewage treatment works. The total expenditure has declined by 4% and unit treatment cost by 10% as the volume of sewage treated and the number of sewage treatment works and pumping stations have increased by 6% and 27% respectively over the past few years.

20. The projected TES recovery rate for 2007-08 is around 84%. With the proposed adjustments in COD values, revised apportionment of costs between SC and TES, and phased increases in the TES rates, we project that the attributable operating cost could be recovered fully after the second increment in 2009-10.

THE AMENDMENT REGULATION

21. The main provisions of the Amendment Regulation are –

- (a) **Section 5** repeals and replaces Schedule 1 to the Sewage Services (Trade Effluent Surcharge) Regulation (the Regulation) which sets out the applicable TES rates for the 27 TES trades remaining in the TES scheme;
- (b) **Section 6** repeals and replaces Schedule 2 to the Regulation which sets out the generic COD values for the 27 TES trades remaining in the TES scheme; and
- (c) **Section 8** repeals and replaces the matrices in Schedule 4 to the Regulation which are used to determine a new TES rate for a consumer after a reassessment provided for by the Regulation.

22. The above amendments to the Regulation are made based on the findings of the survey. The amendments are necessary to ensure a fair and equitable sharing of the operating cost of providing sewage services amongst different parties according to the polluter-pays principle.

LEGISLATIVE TIMETABLE

23. The legislative timetable will be as follows –

Publication in the Gazette	9 May 2008
Tabling at the LegCo	14 May 2008
Commencement of amendment regulation	1 August 2008

IMPLICATIONS OF THE PROPOSAL

24. The Amendment Regulation is in conformity with the Basic Law, including the provisions concerning human rights. It does not affect the current binding effect of the existing provisions of the Sewage Services Ordinance and its subsidiary legislation. It has no civil service implications. The proposal has

economic, financial, environmental and sustainability implications as follows –

(a) Economic implications

Increases in the TES rates for 14 trades, which account for some 8% of the established accounts, will incentivise them to adopt more effective pollution control measures and economise on using water resources. The proposed TES increments will raise the operating costs of the majority of trades by less than \$200 per month. The overall impact on these traders is unlikely to be significant.

(b) Financial implications

The total net financial implications assuming the proposed TES revisions will take effect on 1 August 2008 and 1 August 2009 are –

(i) In the 2008-09 financial year, the estimated net reduction in TES revenue will be \$32.4M. Following the adjustments in the COD values, revised apportionment of costs between the SC and the TES, and the TES rates, the cost recovery rate for the TES will be enhanced from 84% to 93%.

(ii) In the 2009-10 financial year, the net reduction in the TES will be \$50.5M. The TES recovery rate will be further enhanced to 100%.

(c) Environmental implications

With adjustments in the TES to reflect the latest pollution control practices, the trades will have more incentive to adopt suitable measures to reduce the amount of pollution discharged. The proposals are in line with the polluter-pays principle which is widely supported in the community and by the green groups in particular.

(d) Sustainability implications

The proposed adjustments in the TES are modest and will not impose significant economic pressure on the public and the trades. The move to a more rigorous application of the polluter-pays principle should encourage more rational behaviour and thus help reduce the overall cost of wastewater treatment to society. In general, the proposal is in line with the sustainability principles of minimising our ecological footprint through further application of the polluter-pays principle.

ENQUIRIES

25. For any enquiries, please contact Eric K LEE, Senior Administrative Officer (Water Policy Division), on 2594 6284.

BACKGROUND

26. The sewage services charging scheme was introduced in Hong Kong on 1 April 1995 backed by the Sewage Services Ordinance enacted in 1994, the Sewage Services (Sewage Charge) Regulation in 1995 and the Sewage Services (Trade Effluent Surcharge) Regulation in 1995.

27. The SC aims to recover the cost of collecting and treating sewage at or below a pollution strength equivalent to domestic sewage. The SC is levied on all users whose premises are connected to a government sewer. The TES is an additional charge on top of the SC, applying to 30 trades, for the additional cost incurred in treating effluents of strength stronger than domestic sewage. Members of the same trades are subject to trade-specific TES rates, which are based on the respective generic COD values for each trade. Individual members of a trade are entitled to a lower TES rate if they can, through a reassessment process, demonstrate that the effluent they discharge is weaker than that suggested.

Environmental Protection Department

9 May 2008

File Ref. : EP(CR) 9/35/16

SEWAGE SERVICES (TRADE EFFLUENT SURCHARGE)(AMENDMENT) REGULATION 2008

(Made by the Chief Executive in Council under section 12 of the Sewage Services Ordinance (Cap. 463))

1. Commencement

This Regulation shall come into operation on 1 August 2008.

2. Interpretation

(1) Section 2 of the Sewage Services (Trade Effluent Surcharge) Regulation (Cap. 463 sub. leg. B) is amended, in the English text, in the definition of “strength of domestic sewage”, by repealing the semicolon and substituting a full stop.

(2) Section 2 is amended by repealing the definition of “water control zone”.

3. Trade effluent surcharge rates

Section 3(1)(a) and (b) is repealed and the following substituted –

- “(a) at the rate specified in column 3 of Schedule 1 if the billing period for the surcharge begins on a date between 1 August 2008 and 31 July 2009 (both days inclusive); or
- (b) at the rate specified in column 4 of Schedule 1 if the billing period for the surcharge begins on or after 1 August 2009.”.

4. Transitional

(1) Section 8 is amended by renumbering it as section 8(1).

(2) Section 8 is amended by adding –

“(2) Where a new trade effluent surcharge rate is determined under section 4(2) and the billing period during which the determination is made begins before 1 August 2008, the reference to Schedules 2 and 4 in section 4(2) shall be read as a

reference to those Schedules as in force immediately before 1 August 2008.

(3) Where a new trade effluent surcharge rate is determined under section 4(2) and the billing period during which the determination is made begins on a date between 1 August 2008 and 31 July 2009 (both days inclusive) –

- (a) the reference to Schedule 2 in section 4(2) shall be read as a reference to Schedule 2 as in force on 1 August 2008; and
- (b) the applicable matrix is the matrix in Part I of Schedule 4.

(4) Where a new trade effluent surcharge rate is determined under section 4(2) and the billing period during which the determination is made begins on or after 1 August 2009 –

- (a) the reference to Schedule 2 in section 4(2) shall be read as a reference to Schedule 2 as in force on 1 August 2008; and
- (b) the applicable matrix is the matrix in Part II of Schedule 4.”.

5. Schedule 1 substituted

Schedule 1 is repealed and the following substituted –

“SCHEDULE 1

[s. 3]

TRADE EFFLUENT SURCHARGE RATES

Item	Trade, business or manufacture	Rate for billing period beginning on a date between 1 August 2008 and 31 July 2009 (both days inclusive)	Rate for billing period beginning on or after 1 August 2009
		\$/m ³	\$/m ³
1.	yarn sizing	4.13	4.51
2.	washing new garments, excluding laundries	0.41	0.41
3.	bleaching and dyeing of knitted fabric	0.41	0.41
4.	bleaching and dyeing of woven fabric	1.20	1.20
5.	knit outerwear	0.41	0.41
6.	wearing apparel other than knit outerwear	0.41	0.41
7.	spinning cotton	0.37	0.41
8.	soap and cleaning preparations, perfumes, cosmetics	4.13	4.51

9.	medicines	4.13	4.51
10.	paints, varnishes and lacquers	1.27	1.38
11.	basic industrial chemicals	0.76	0.76
12.	tanneries and leather finishing	0.76	0.76
13.	pulp, paper and paperboard	4.47	4.88
14.	soft drinks and carbonated waters industries	0.47	0.47
15.	breweries and manufacture of malt liquor	4.13	4.51
16.	distilling, rectifying and blending spirits	4.13	4.51
17.	cocoa, chocolate and sugar confectionery	4.13	4.51
18.	vermicelli, noodles and similar farinaceous products	4.13	4.51
19.	bakery products	3.59	3.92
20.	grain mill products	2.77	2.77

21.	vegetable oil, peanut oil, peppermint oil and aniseed oil	2.48	2.48
22.	canning, preserving and processing of fish and crustaceans	1.78	1.78
23.	canning and preserving of fruit and vegetables	3.41	3.41
24.	dairy products	4.13	4.51
25.	slaughtering, preparing and preserving meat	1.74	1.74
26.	soy and other sauces	4.13	4.51
27.	restaurants	3.05	3.05”.

6. Schedule 2 substituted

Schedule 2 is repealed and the following substituted –

“SCHEDULE 2

[ss. 4 & 8]

COD VALUES

Item	Trade, business or manufacture	COD _t g/m ³	COD _s g/m ³
1.	yarn sizing	2000	2000

2.	washing new garments, excluding laundries	566	507
3.	bleaching and dyeing of knitted fabric	665	607
4.	bleaching and dyeing of woven fabric	1053	981
5.	knit outerwear	566	507
6.	wearing apparel other than knit outerwear	566	507
7.	spinning cotton	570	541
8.	soap and cleaning preparations, perfumes, cosmetics	2000	2000
9.	medicines	2000	2000
10.	paints, varnishes and lacquers	1000	619
11.	basic industrial chemicals	677	656
12.	tanneries and leather finishing	807	781

13.	pulp, paper and paperboard	1870	947
14.	soft drinks and carbonated waters industries	826	628
15.	breweries and manufacture of malt liquor	2000	2000
16.	distilling, rectifying and blending spirits	2000	2000
17.	cocoa, chocolate and sugar confectionery	2000	2000
18.	vermicelli, noodles and similar farinaceous products	2000	2000
19.	bakery products	2000	1506
20.	grain mill products	1521	1290
21.	vegetable oil, peanut oil, peppermint oil and aniseed oil	1320	1310
22.	canning, preserving and processing of fish and crustaceans	1141	873
23.	canning and preserving of fruit	2000	1822

and vegetables

24.	dairy products	2000	2000
25.	slaughtering, preparing and preserving meat	1129	769
26.	soy and other sauces	2000	2000
27.	restaurants	1630	1320”.

7. Trade, business or manufacture

Schedule 3 is amended by repealing –

“1. bleaching and dyeing of garments”.

8. Schedule 4 substituted

Schedule 4 is repealed and the following substituted –

“SCHEDULE 4

[ss. 4 & 8]

PART I

TRADE EFFLUENT SURCHARGE RATE MATRIX FOR BILLING PERIOD BEGINNING ON A DATE
BETWEEN 1 AUGUST 2008 AND 31 JULY 2009 (BOTH DAYS INCLUSIVE)

COD _(s) (g/m ³)	COD _(s) (g/m ³)															
	0	100	130	160	200	250	320	400	500	630	790	1000	1260	1580	2000	
2000	\$4.13															2000
1580	\$3.08	\$3.08	\$3.08	\$3.12	\$3.34	\$3.60	\$3.96	\$4.39								1580
1260	\$2.27	\$2.27	\$2.27	\$2.33	\$2.53	\$2.80	\$3.17	\$3.59	\$4.12	\$4.79						1260
1000	\$1.63	\$1.63	\$1.63	\$1.68	\$1.89	\$2.15	\$2.52	\$2.94	\$3.46	\$4.15	\$4.99	\$6.09				1000
790	\$1.10	\$1.10	\$1.10	\$1.16	\$1.37	\$1.63	\$2.00	\$2.41	\$2.94	\$3.63	\$4.47	\$5.57				790
630	\$0.70	\$0.70	\$0.70	\$0.75	\$0.96	\$1.22	\$1.59	\$2.01	\$2.53	\$3.22	\$4.06	\$5.17	\$6.53			630
500	\$0.37	\$0.37	\$0.37	\$0.43	\$0.63	\$0.90	\$1.27	\$1.69	\$2.22	\$2.89	\$3.73	\$4.84	\$6.20			500
400	\$0.12	\$0.12	\$0.12	\$0.17	\$0.39	\$0.66	\$1.02	\$1.44	\$1.97	\$2.64	\$3.48	\$4.59	\$5.95	\$7.63		400
320	\$0.00	\$0.00	\$0.00	\$0.05	\$0.26	\$0.52	\$0.90	\$1.31	\$1.83	\$2.52	\$3.36	\$4.47	\$5.83	\$7.51		320
250	\$0.00	\$0.00	\$0.00	\$0.05	\$0.26	\$0.52	\$0.90	\$1.31	\$1.83	\$2.52	\$3.36	\$4.47	\$5.83	\$7.51		250
200	\$0.00	\$0.00	\$0.00	\$0.05	\$0.26	\$0.52	\$0.90	\$1.31	\$1.83	\$2.52	\$3.36	\$4.47	\$5.83	\$7.51		200

160	\$0.00	\$0.00	\$0.00	\$0.05	\$0.26	\$0.52	\$0.90	\$1.31	\$1.83	\$2.52	\$3.36	\$4.47	\$5.83	\$7.51	160	
130	\$0.00	\$0.00	\$0.00	\$0.05	\$0.26	\$0.52	\$0.90	\$1.31	\$1.83	\$2.52	\$3.36	\$4.47	\$5.83	\$7.51	130	
100	\$0.00	\$0.00	\$0.00	\$0.05	\$0.26	\$0.52	\$0.90	\$1.31	\$1.83	\$2.52	\$3.36	\$4.47	\$5.83	\$7.51	100	
0	\$0.00	\$0.00	\$0.00	\$0.05	\$0.26	\$0.52	\$0.90	\$1.31	\$1.83	\$2.52	\$3.36	\$4.47	\$5.83	\$7.51	\$9.72	0
	0	100	130	160	200	250	320	400	500	630	790	1000	1260	1580	2000	

$\text{COD}_{(t-s)} \text{ (g/m}^3\text{)}$

PART II

TRADE EFFLUENT SURCHARGE RATE MATRIX FOR BILLING PERIOD BEGINNING ON OR AFTER
1 AUGUST 2009

$\text{COD}_{(s)}$ (g/m^3)	0	100	130	160	200	250	320	400	500	630	790	1000	1260	1580	2000	
	2000	\$4.51														2000
1580	\$3.36	\$3.36	\$3.36	\$3.41	\$3.65	\$3.94	\$4.33	\$4.79								1580
1260	\$2.48	\$2.48	\$2.48	\$2.54	\$2.77	\$3.05	\$3.46	\$3.92	\$4.50	\$5.23						1260
1000	\$1.78	\$1.78	\$1.78	\$1.84	\$2.06	\$2.35	\$2.75	\$3.21	\$3.78	\$4.53	\$5.45	\$6.65				1000
790	\$1.20	\$1.20	\$1.20	\$1.26	\$1.49	\$1.78	\$2.18	\$2.64	\$3.21	\$3.96	\$4.88	\$6.08				790
630	\$0.76	\$0.76	\$0.76	\$0.82	\$1.05	\$1.34	\$1.74	\$2.19	\$2.77	\$3.52	\$4.44	\$5.64	\$7.13			630
500	\$0.41	\$0.41	\$0.41	\$0.47	\$0.69	\$0.98	\$1.38	\$1.85	\$2.42	\$3.16	\$4.08	\$5.28	\$6.77			500

400	\$0.13	\$0.13	\$0.13	\$0.19	\$0.43	\$0.72	\$1.11	\$1.57	\$2.15	\$2.89	\$3.80	\$5.01	\$6.50	\$8.34	400	
320	\$0.00	\$0.00	\$0.00	\$0.06	\$0.29	\$0.57	\$0.98	\$1.43	\$2.00	\$2.75	\$3.67	\$4.88	\$6.37	\$8.20	320	
250	\$0.00	\$0.00	\$0.00	\$0.06	\$0.29	\$0.57	\$0.98	\$1.43	\$2.00	\$2.75	\$3.67	\$4.88	\$6.37	\$8.20	250	
200	\$0.00	\$0.00	\$0.00	\$0.06	\$0.29	\$0.57	\$0.98	\$1.43	\$2.00	\$2.75	\$3.67	\$4.88	\$6.37	\$8.20	200	
160	\$0.00	\$0.00	\$0.00	\$0.06	\$0.29	\$0.57	\$0.98	\$1.43	\$2.00	\$2.75	\$3.67	\$4.88	\$6.37	\$8.20	160	
130	\$0.00	\$0.00	\$0.00	\$0.06	\$0.29	\$0.57	\$0.98	\$1.43	\$2.00	\$2.75	\$3.67	\$4.88	\$6.37	\$8.20	130	
100	\$0.00	\$0.00	\$0.00	\$0.06	\$0.29	\$0.57	\$0.98	\$1.43	\$2.00	\$2.75	\$3.67	\$4.88	\$6.37	\$8.20	100	
0	\$0.00	\$0.00	\$0.00	\$0.06	\$0.29	\$0.57	\$0.98	\$1.43	\$2.00	\$2.75	\$3.67	\$4.88	\$6.37	\$8.20	\$10.61	0
	0	100	130	160	200	250	320	400	500	630	790	1000	1260	1580	2000	

COD_(t-s) (g/m³)”.

Clerk to the Executive Council

COUNCIL CHAMBER

2008

Explanatory Note

This Regulation amends the Sewage Services (Trade Effluent Surcharge) Regulation (Cap. 463 sub. leg. B) (“the principal Regulation”).

2. Sections 3 and 5 amend section 3(1) of and Schedule 1 to the principal Regulation to set out the new trade effluent surcharge rates applicable to 27 trades.
3. Section 6 amends Schedule 2 to the principal Regulation to set out the new chemical oxygen demand values applicable to the 27 trades.
4. Bleaching and dyeing of garments have been removed from Schedules 1, 2 and 3 to the principal Regulation while textile stencilling and printing and laundries have been removed from Schedules 1 and 2 to the principal Regulation because the strength of their effluents are found to be comparable to or not stronger than domestic sewage.
5. Section 8 amends Schedule 4 to the principal Regulation to set out the new charging matrices for calculating trade effluent surcharge rates if the rates are varied in accordance with the mechanism provided in section 4 of the principal Regulation.

Summary results of the trade effluent survey

	Trade, business or manufacture	Chemical Oxygen Demand values (grammes per cubic metre) (Existing values in brackets)	
		COD_{total}	COD_{settled}
1.	Yarn sizing	8,200 (5,160)	7,525 (4,436)
2.	Washing new garments, excluding laundries	566 (660)	507 (330)
3.	Bleaching and dyeing of garments	351 (730)	304 (635)
4.	Bleaching and dyeing of knitted fabric	665 (980)	607 (837)
5.	Bleaching and dyeing of woven fabric	1,053 (1,290)	981 (1,090)
6.	Textile stencilling and printing	387 (890)	371 (404)
7.	Knit outerwear	566 (1,051)	507 (935)
8.	Wearing apparel other than knit outerwear	566 (990)	507 (476)
9.	Spinning cotton	Not available (570)	Not available (541)
10.	Laundries	397 (725)	296 (425)
11.	Soap and cleaning preparations, perfumes, cosmetics	4,425 (7,805)	4,204 (7,453)
12.	Medicines	4,726 (2,910)	4,358 (2,482)
13.	Paints, varnishes and lacquers	Not available (1,000)	Not available (619)
14.	Basic industrial chemicals	677 (2,500)	656 (2,262)

	Trade, business or manufacture	Chemical Oxygen Demand values (grammes per cubic metre) (Existing values in brackets)	
		COD _{total}	COD _{settled}
15.	Tanneries and leather finishing	807 (1,755)	781 (1,436)
16.	Pulp, paper and paperboard	Not available (1,870)	Not available (947)
17.	Soft drinks and carbonated waters industries	826 (1,200)	628 (914)
18.	Breweries and manufacture of malt liquor	6,401 (1,780)	5,566 (1,304)
19.	Distilling, rectifying and blending spirits	60,250 (580)	56,500 (485)
20.	Cocoa, chocolate and sugar confectionery	2,572 (2,500)	2,142 (2,214)
21.	Vermicelli, noodles, and similar farinaceous products	2,794 (2,500)	2,119 (1,548)
22.	Bakery products	2,614 (2,500)	1,506 (1,548)
23.	Grain mill products	1,521 (2,860)	1,290 (680)
24.	Vegetable oil, peanut oil, peppermint oil and aniseed oil	1,320 (7,600)	1,310 (5,315)
25.	Canning, preserving and processing of fish and crustaceans	1,141 (1,495)	873 (1,257)
26.	Canning and preserving fruit and vegetables	2,614 (1,990)	1,822 (1,628)
27.	Dairy products	15,322 (3,960)	11,918 (3,084)
28.	Slaughtering, preparing and preserving meat	1,129 (3,870)	769 (2,823)
29.	Soy and other sauces	3,795 (3,900)	3,190 (3,243)
30.	Restaurants	1,630 (3,600)	1,320 (2,315)