Appendix 3.26c Estimation of Odour Emission Rates for New Yau Ma Tei Typhoon Shelter

	Odour Emission Rates (OER) (ou/m²/s)			
Grid	Monitoirng Results in	Review Results in	Review Results in	Estimated Results for
No.	August 2012	February 2013	March 2013	Current Odour Scenario
	[Note (a)]	[Note (b)]	[Note (c)]	Modelling
1	0.032			0.032
2	0.032			0.032
3	0.032			0.032
4	0.032			0.032
5	0.106		0.997	0.997
6	0.032			0.032
7	1.322	1.126	0.291	1.322
8	0.130		0.027	0.130
9	0.205		0.142	0.205
10	0.093		0.029	0.093
11	0.032		0.025	0.032
12	0.032			0.032
13	0.520			0.520
14	0.033		0.022	0.033
15	0.032			0.032
16	0.032			0.032
17	0.032		0.012	0.032
18	0.032			0.032
19	0.032			0.032
20	0.175		0.108	0.175
21	0.148		0.037	0.148
22	0.228		0.122	0.228
23	0.511		0.830	0.830
24	0.071		0.035	0.071
25	0.031		0.004	0.032
26	0.160		0.004	0.160
27	0.005		0.052	0.052
28	0.113		0.113	0.113
29	1.129	1.061	0.713	1.129
30	2.702	1.061	0.713	2.702

<u>Notes</u>

- (a) The results were obtained by using air drawn through activated carbon filter as carrier gas. Therefore, the results in shaded cells (identified with high OER and sewage/rotten egg odour) have been divided by an adjustment factor to provide more realistic estimates. The adjustment factor is 74.4 for those grids in the vicinity of Cherry St Box Culvert (Grids 20 and above) and 161.07 for those grids in the vicinity of Jordan Box Culvert (Grids 14 and below). The adjustment factor is taken as the lowest ratio of OER obtained by using air drawn through activated carbon filter as carrier gas to that by using nitrogen gas for the relevant area (see Appendix 3.26b).
- (b) The results were obtained by using nitrogen gas as carrier gas. The results for grids 7, 29 and 30 are average of the OER values obtained during different rounds of measurements in February 2013 (see Appendix 3.26b). As one odour sample was collected to cover both grids 29 and 30 due to their close proximity, the OERs for both grids were estimated based on the testing result of the same odour sample.
- (c) The results were obtained by using nitrogen gas as carrier gas. The results for grids 11 and 17 are average of the OER values obtained during different rounds of measurements in March 2013 (see Appendix 3.26b). As one odour sample was collected to cover both grids 29 and 30 due to their close proximity, the OERs for both grids were estimated based on the testing result of the same odour sample.
- (d) The results adopted for modelling are taken as the maximum of the corresponding values in August 2012, February 2013 and March 2013 in order to obtain conservative estimates of the current odour scenario.