

Appendix F

Waste Flow Table

Monthly Summary Waste Flow Table for 2014 (year)

Name of Person completing the record: Selena YANG / ES

Project : Hong Kong – Zhuhai – Macao Bridge, Hong Kong Crossing Boundary Facilities – Infrastructure Works Stage I (Western Portion)

Contract No.: HY/2013/02

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste (see Note 4)	Others, e.g. general refuse (see Note 3)
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m ³)
Jan											
Feb											
Mar											
Apr											
May											
Jun											
Sub-total											
Jul	0	0	0	0	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0	0	0	0	0
Sep	0	0	0	0	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0	0.492	0	0	0
Total	0	0	0	0	0	0	0	0.492	0	0	0

Notes: (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.

(3) Broken concrete for recycling into aggregates.

Monthly Summary Waste Flow Table for 2015 (year)

Name of Person completing the record: Joy CHAN / ES

Project : Hong Kong – Zhuhai – Macao Bridge, Hong Kong Crossing Boundary Facilities – Infrastructure Works Stage I (Western Portion)

Contract No.: HY/2013/02

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste (see Note 4)	Others, e.g. general refuse (see Note 3)
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m ³)
Jan	0	0	0	0	0	0	0	0.048	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	3.206	0	0
Apr	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0.046	0	0	0.0065
Jun	0	0	0	0	0	0	0	0	0	0	0
Sub-total	0	0	0	0	0	0	0	0.094	3.206	0	0.0065
Jul	0	0	0	0	0	0	0.005	0.0575	0.007	0	0.013
Aug	0	0	0	0	0	0	0	0	1.043	0	0.013
Sep	0.039	0	0	0	0.039	0	0	0.069	0.004	0	0.013
Oct	0	0	0	0	0	0	0	0	0	0	0.0455
Nov	0	0	0	0	0	0.1825	0	0.069	0.854	0	0.0325
Dec	0	0	0	0	0	0	0	0	0	0	0.0390
Total	0.039	0	0	0	0.039	0.1825	0.005	0.2895	5.114	0	0.1625

- Notes: (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
 (2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.
 (3) Broken concrete for recycling into aggregates.



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Monthly Summary Waste Flow Table for 2016 (year)

Name of Person completing the record: Paper CHAN / ES

Project : Hong Kong – Zhuhai – Macao Bridge, Hong Kong Crossing Boundary Facilities – Infrastructure Works Stage I (Western Portion)

Contract No.: HY/2013/02

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 1)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse (see Note 3)
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m ³)
Jan	0	0	0	0	0	0	0	0.0690	2.6600	0	0.0195
Feb	0	0	0	0	0	0	0	0	0	0	0.0455
Mar	0	0	0	0	0	0	0	0.0690	0	0	0.0325
Apr	0	0	0	0	0	11.5920	0	0	0	0	0.0455
May	0	0	0	0	0	7.1400	6.3260	0.0805	0	0	0.0585
Jun	0	0	0	0	0	2.7600	0	0	6.0900	0	0.0325
Sub-total	0	0	0	0	0	21.4920	6.3260	0.2185	8.7500	0	0.2340
Jul	0	0	0	0	0	0	0	0	0	0	0.0780
Aug	0	0	0	0	0	2.6920	0	0.1400	0	0	0.0520
Sep	0	0	0	0	0	1.0350	0	0.1600	0	0	0.0325
Oct	0	0	0	0	0	0.6660	0	0.0000	0	0	0.0650
Nov	0	0	0	0	0	5.3590	0	0.1800	7.5500	0	0.0715
Dec	0	0	0	0	0.3940	5.5440	99.3100	0.1400	1.6332	0	0.1105
Total	0	0	0	0	0.3940	36.7880	105.6360	0.8385	17.9332	0	0.6435

Notes:

(1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.

(3) Broken concrete for recycling into aggregates.



China Harbour Engineering Company Limited

Monthly Summary Waste Flow Table for 2017 (year)

Name of Person completing the record: Paper CHAN / EO

Project : Hong Kong – Zhuhai – Macao Bridge, Hong Kong Crossing Boundary Facilities – Infrastructure Works Stage I (Western Portion)

Month	Actual Quantities of Inert C&D Materials Generated Monthly										
	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill (see Note 1)	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m ³)
Jan	0	0	0	0	0	0	0	0.0950	0	0	0.1755
Feb	0.4950	0	0	0	0.4950	5.4450	0	0.1800	0.0248	0	0.1105
Mar	0.0400	0	0	0	0.0400	0	0	0	0	0	0.2145
Apr	0	0	0	0	0	0	52.090	0.1800	0	0	0.2535
May	0	0	0	0	0	0	0	0	0.5880	0	0.3445
Jun	0	0	0	0	0	0	187.510	0.1600	1.6800	0	0.3380
Sub-total	0.5350	0	0	0	0.5350	5.4450	239.600	0.6150	2.2928	0	1.4365
Jul	4.8111	0	0	0	4.8111	0	274.710	0	2.1000	0	0.6955
Aug	3.0550	0	0	0	3.0550	1.8950	172.000	0.2200	3.6400	0	0.8580
Sep	4.6600	0	0	0	4.6600	7.1980	0	0.2200	2.6400	0	1.2025
Oct	2.0502	0	0	0	2.0502	9.1970	216.720	0	2.6040	0	0.5070
Nov	10.1628	0	0	0	10.1628	27.1957	1265.52	0.1600	0.0217	0	0.6175
Dec	3.82525	0	0	0	3.82525	33.9645	0	0	0	0	0.7020
Total	29.0993	0	0	0	29.0993	84.8952	2168.550	1.2150	13.2985	0	6.0190

Notes:

- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.
- (3) Broken concrete for recycling into aggregates.



China Harbour Engineering Company Limited

Monthly Summary Waste Flow Table for 2018 (year)

Name of Person completing the record: Endy Tse / EO

Project : Hong Kong – Zhuhai – Macao Bridge, Hong Kong Crossing Boundary Facilities – Infrastructure Works Stage I (Western Portion)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill (see Note 1)	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m ³)
Jan	20.046	0	0	18.737	1.309	43.254	0	0.200	0	0	0.553
Feb	1.375	0	0	0	1.375	4.242	0	0.160	0	0	0.455
Mar	2.001	0	0	0	2.001	11.416	0	0.220	1.136	0	0.813
Apr	0.756	0	0	0	0.756	0.527	0	0	0	0	0.657
May	0.049	0	0	0	0.049	0	0	0.180	0.910	0	0.279
Jun	0.033	0	0	0	0.033	0	0	0.800	0	0	0.106
Sub-total	24.260	0	0	18.737	5.523	59.439	0	1.560	2.046	0	2.863
Jul	0.124	0	0	0	0.124	0	0	0.920	0	0	0.116
Aug	0.287	0	0	0	0.287	0	0	0	0	0	0.110
Sep	0.274	0	0	0	0.274	0	0	0	0	0	0.117
Oct	0.068	0	0	0	0.068	0	0	0	0	0	0.208
Nov	0.196	0	0	0	0.196	0	0	0	0	0	0.046
Dec	0.0195	0	0	0	0.0195	0	0	0	0	0	0.078
Total	25.229	0	0	18.737	6.492	59.439	0	2.480	2.046	0	3.538

Notes:

- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.
- (3) Broken concrete for recycling into aggregates.



China Harbour Engineering Company Limited

Monthly Summary Waste Flow Table for 2019 (year)

Name of Person completing the record: Endy Tse / EO

Project : Hong Kong – Zhuhai – Macao Bridge, Hong Kong Crossing Boundary Facilities – Infrastructure Works Stage I (Western Portion)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete (see Note 3)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill (see Note 1)	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse
	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000m ³)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 m ³)
Jan	0.111	0	0	0	0.111	0	0	0	0	0	0.078
Feb											
Mar											
Apr											
May											
Jun											
Sub-total	0.111	0	0	0.000	0.111	0.000	0	0.000	0.000	0	0.078
Jul											
Aug											
Sep											
Oct											
Nov											
Dec											
Total	0.111	0	0	0.000	0.111	0.000	0	0.000	0.000	0	0.078

Notes:

- (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- (2) Plastics refer to plastic bottles/containers, plastic sheets/ foam from packaging materials.
- (3) Broken concrete for recycling into aggregates.



China Harbour Engineering Company Limited

Final revised Monthly Summary of Marine Sediment for 2016

Month	a. Volume of Marine Sediment Generated	b. Volume of Marine Sediment Disposed (m ³)	c. Estimated Volume of Marine Sediment Stored on
Jan	4029 ⁽¹⁾	1272	2757
Feb	1133	2816	1074
Mar	414	600	888
Apr	4240	5128	0
May	1020	0	1020
Jun	1097	1200	917
Jul	957	728	1146
Aug	953	1784	315
Sep	2013	2328	0
Oct	1096	1096	0
Nov*	1568	0	1568
Dec*	0	1568	0
Total	18520	18520	0

Note:

1) 2771 m³ Marine Sediment Generated has been brought forward from pervious year

2) c=(c in pervious month+a-b)

*Revised volume of marine sediment generated in Nov and Dec are confirmed with the RSS.



China Harbour Engineering Company Limited

Monthly Summary of Marine Sediment for 2017

Month	a. Volume of Marine Sediment Generated	b. Volume of Marine Sediment Disposed (m ³)	c. Estimated Volume of Marine Sediment Stored on
Jan	0	0	0 ^(*)
Feb	88	88	0
Mar	0	0	0
Apr	624	624	0
May	0	0	0
Jun	1432	1432	0
Jul	0	0	0
Aug	0	0	0
Sep	0	0	0
Oct	0	0	0
Nov			
Dec			
Total	2144	2144	0

Note: * The volume of marine sediment disposed is measured by barge load while the volume of marine sediment generated and stored on site is a rough estimation. The accurate volume of marine sediment excavated was hardly measured and thus tiny difference between the volume of marine sediment disposed and the volume of marine sediment generated would be existed. Therefore, after on-site checking by the Contractor and confirmed by RSS that the final estimated quantity of marine sediment stored at site in 2016 is 0 m³ instead of 1422 m³.