

## Monthly Summary Waste Flow Table for 2016



| Month     | Actual Quantities of Inert C&D Materials Generated Monthly |  |                           |  |   |                          | Actual Quantities of C&D Wastes Generated Monthly |  |   |                   |                                |
|-----------|--|--|---------------------------|--|---|--------------------------|---|--|---|-------------------|--------------------------------|
|           | a.Total Quantity Generated<br>(see Note 8)                 | b. Hard Rock and Large Broken Concrete<br>(see Note 9) | c. Reused in the Contract | d. Reused in Other Projects<br>(see Note 11) | e. Disposed as Public Fill<br>(see Note 10) | f. Imported Fill         | g. Metals<br>(see Note 5)                         | h. Paper / Cardboard Packaging<br>(see Note 5) | i. Plastics<br>(see Note 3)<br>(see Note 5) | j. Chemical Waste | k. Others, e.g. general refuse |
|           | (in '000m <sup>3</sup> )                                   | (in '000m <sup>3</sup> )                               | (in '000m <sup>3</sup> )  | (in '000m <sup>3</sup> )                     | (in '000m <sup>3</sup> )                    | (in '000m <sup>3</sup> ) | (in '000kg)                                       | (in '000kg)                                    | (in '000kg)                                 | (in '000kg)       | (in '000m <sup>3</sup> )       |
| January   | 3.209  | 0.233  | 0.000                     | 2.079  | 1.130                                       | 0.000                    | 145.240   | 0.935  | 0.000                                       | 1.200             | 0.123                          |
| February  | 1.526  | 0.025  | 0.000                     | 0.000  | 1.526                                       | 0.000                    | 74.800  | 0.000  | 0.000                                       | 0.000             | 0.125                          |
| March     | 3.698  | 0.364  | 0.000                     | 0.099  | 3.599                                       | 0.036                    | 100.720   | 1.908  | 0.000                                       | 0.000             | 0.170                          |
| April     | 3.300  | 0.605  | 0.000                     | 0.198  | 3.102                                       | 0.000                    | 102.030   | 0.000  | 0.000                                       | 0.000             | 0.169                          |
| May       | 1.016  | 0.264  | 0.000                     | 0.000  | 1.016                                       | 0.000                    | 88.010  | 1.062  | 0.000                                       | 2.600             | 0.278                          |
| June      | 0.903  | 0.038  | 0.000                     | 0.000  | 0.903                                       | 5.382                    | 139.740   | 1.197  | 0.000                                       | 0.000             | 0.262                          |
| Sub-total | 13.652   | 1.529  | 0.000                     | 2.376  | 11.276                                      | 5.418                    | 650.540   | 5.102  | 0.000                                       | 3.800             | 1.127                          |
| July      | 1.863  | 0.220  | 0.000                     | 1.238  | 0.625                                       | 21.896                   | 16.520  | 0.000  | 0.000                                       | 0.600             | 0.445                          |
| August    | 4.056  | 0.000  | 4.056                     | 0.000  | 0.000                                       | 9.290                    | 15.930  | 1.344  | 0.000                                       | 0.000             | 0.390                          |
| September | 0.806  | 0.000  | 0.806                     | 0.000  | 0.000                                       | 2.591                    | 30.360  | 1.290  | 0.000                                       | 0.000             | 0.469                          |
| October   |  |  |                           |  |   |                          |   |  |   |                   |                                |
| November  |  |  |                           |  |   |                          |   |  |   |                   |                                |
| December  |  |  |                           |  |   |                          |   |  |   |                   |                                |
| Total     | 20.377   | 1.749  | 4.862                     | 3.614  | 11.901                                      | 39.195                   | 713.350   | 7.736  | 0.000                                       | 4.400             | 2.431                          |

Total C&D waste generated = a+b+f+g+h+i+j+k

Total C&D waste generated (excluded excavated material) = g+h+i+j+k

Total C&D waste recycled = c+d+g+h+i

% of recycled C&D waste = (Total C&D waste generated - Total C&D waste recycled) / Total C&D waste generated

Notes: (1) The performance target are given in PS Clause 6(14)

(2) The waste flow table shall also include C&D materials that are not specified in the Contract to be imported for use at the Site.

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

(4) The Contractor shall also submit the latest forecast of the amount of C&D materials expected to be generated from the Works, together with a break down of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000m<sup>3</sup>.

(5) All recyclable materials, including metals, paper / cardboard packaging, plastics, etc. will be collected by registered collector for recycling.

(6) Conversion factors for reporting purpose:

in-situ: rock = 2.5 tonnes/m<sup>3</sup>; soil = 2.0 tonnes/m<sup>3</sup>

excavated: rock = 2.0 tonnes/m<sup>3</sup>; soil = 1.8 tonnes/m<sup>3</sup>; broken concrete and bitumen = 2.4 tonnes/m<sup>3</sup>

C&D Waste = 0.9 tonnes/m<sup>3</sup>; bentonite slurry = 2.8 tonnes/m<sup>3</sup>

Diesel density: 0.8kg/l

(7) Numbers are rounded off to the nearest three decimal places.

(8) The "Total Quantity Generated" equals to the sum of "Reuse in the Contract", "Reuse in Other Projects" and "Disposed as Public Fill".

(9) The "Hard Rock and Large Broken Concrete" were disposed as public fill.

(10) The amount in "Disposed as Public Fill" included the "Hard Rock and Large Broken Concrete" disposed as public fill.

(11) The item d "Reused in Other Projects" includes sand only. Other projects refer to Contracts No. HY/2010/02 and HY/2014/05. Inert C&D Materials were transferred to Contract No. HY/2010/02 in January 2016 and to Contract No. HY/2014/05 in March and April 2016.

**Monthly Summary of Excavated Marine Sediment for 2016**

| <b>Month</b>     | <b>a. Estimated Volume of Excavated Marine Sediment Generated (m<sup>3</sup>)</b> | <b>b. Estimated Volume of Accumulated Excavated Marine Sediment Treated (m<sup>3</sup>)</b> | <b>c. Reused in the Contract (m<sup>3</sup>)</b> | <b>d. Estimated Volume of Excavated Marine Sediment Reused in Other Project (m<sup>3</sup>)<sup>(2)</sup></b> | <b>e. Estimated Volume of Treated Excavated Marine Sediment Stored on Site (Unused) (m<sup>3</sup>)</b> |
|------------------|---|---|--|---|---|
| <b>Year 2016</b> |   |   |  |   |   |
| Jan 2016         | 511   | 400   | 0  | 0   | 2155  |
| Feb 2016         | 693   | 275   | 0  | 0   | 2430  |
| Mar 2016         | 672   | 1,363   | 1215   | 0   | 2578  |
| Apr 2016         | 259   | 756   | 700  | 0   | 2634  |
| May 2016         | 287   | 402   | 0  | 0   | 3036  |
| Jun 2016         | 240   | 336   | 2836   | 0   | 536   |
| Jul 2016         | 331   | 464   | 1000   | 0   | 0   |
| Aug 2016         | 0   | 0   | 0  | 0   | 0   |
| Sep 2016         | 0   | 0   | 0  | 0   | 0   |
| <b>Total</b>     | <b>2,993</b>  | <b>3,996</b>  | <b>5,751</b>                                     | <b>0</b>  | <b>0<sup>(1)</sup></b>  |

Notes: (1) This presents the total quantity of unused treated excavated marine sediment stored on site during the reporting month. This figure includes 1,755 m<sup>3</sup> of treated excavated marine sediment from 2015.