

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
Sediment Quality Report
Project: AGREEMENT NO CE 15_2010(DS) UPGRADING OF CHEUNG CHAU AND TAI O SEWAGE COLLECTION
Order No.: CONTRACT NO. GE/2009/16.19
Drillhole: GRAB SAMPLE

| Analyte Description | | | Silver | Arsenic | Cadmium | Chromium | Copper | Nickel | Lead | Zinc | Mercury | Total Polychlorinated biphenyls | Low M.W. PAHs | High M.W. PAHs | Tributyl Tin | Classification |
|--|--------------------------------|---------------|------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-----------------|---------------------------------|--------------------|---------------------|--------------------|----------------|
| Unit (In dry Wt basis) | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | µg/kg | µg/kg | µg/kg | ug TBT/L | |
| Reporting Limits | | | 0.1 | 1 | 0.2 | 1 | 1 | 1 | 1 | 1 | 0.05 | 18 | 550 | 1700 | 0.015 | |
| Lower Chemical Exceedance Level (LCEL) | | | 1 | 12 | 1.5 | 80 | 65 | 40 | 75 | 200 | 0.5 | 23 | 550 | 1700 | 0.15 | |
| Upper Chemical Exceedance Level (UCEL) | | | <u>2</u> | <u>42</u> | <u>4</u> | <u>160</u> | <u>110</u> | <u>40</u> | <u>110</u> | <u>270</u> | <u>1</u> | <u>180</u> | <u>3160</u> | <u>9600</u> | <u>0.15</u> | |
| 10 x (LCEL) | | | <u>10</u> | <u>120</u> | <u>15</u> | <u>800</u> | <u>650</u> | <u>400</u> | <u>750</u> | <u>2000</u> | <u>5</u> | <u>230</u> | <u>5500</u> | <u>17000</u> | <u>1.5</u> | |
| Sample Description | | | | | | | | | | | | | | | | |
| ALS Lab ID | Sample ID | Sampling Date | | | | | | | | | | | | | | |
| HK1200975001 | GRAB SAMPLE (REFERENCE SAMPLE) | 11/01/2012 | 0.1 | 7 | <0.2 | 34 | 14 | 22 | 31 | 88 | <0.05 | <18 | <550 | <1700 | <0.015 | L |

Bold: Value that exceed LCEL

Bold Italic and Underlined: Value that exceed UCEL

Bold and Underlined: Value that exceed 10 x LCEL

Total PCB: Total PCBs calculated through summation of the 18 PCB congeners, based on raw data above the limit of detection of 1ug/kg.

For detailed information on the individual congeners please refer to the certificate of analysis for the work order.

IS Denoted: Insufficient interstitial water generated for TBT analysis.

Category L: Analytical results less than or equal to Lower Chemical Exceedance Level (LCEL)

Category M: Analytical results greater than Lower Chemical Exceedance Level (LCEL), but less than or equal to Upper Chemical Exceedance Level (UCEL)

Category H: Analytical results greater than Upper Chemical Exceedance Level (UCEL)

Category 10xLCEL: Analytical results greater than 10x Lower Chemical Exceedance Level (10xLCEL)

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
Sediment Quality Report
Project: AGREEMENT NO CE 15_2010(DS) UPGRADING OF CHEUNG CHAU AND TAI O SEWAGE COLLECTION
Order No.: CONTRACT NO. GE/2009/16.19
Drillhole: D8

| Analyte Description | | | Silver | Arsenic | Cadmium | Chromium | Copper | Nickel | Lead | Zinc | Mercury | Total Polychlorinated biphenyls | Low M.W. PAHs | High M.W. PAHs | Tributyl Tin | Classification |
|--|---------------|---------------|-----------|------------|------------|------------|------------|------------|------------|-------------|------------|---------------------------------|---------------|----------------|--------------|----------------|
| Unit (In dry Wt basis) | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | µg/kg | µg/kg | µg/kg | ug TBT/L | |
| Reporting Limits | | | 0.1 | 1 | 0.2 | 1 | 1 | 1 | 1 | 1 | 0.05 | 18 | 550 | 1700 | 0.015 | |
| Lower Chemical Exceedance Level (LCEL) | | | 1 | 12 | 1.5 | 80 | 65 | 40 | 75 | 200 | 0.5 | 23 | 550 | 1700 | 0.15 | |
| Upper Chemical Exceedance Level (UCEL) | | | 2 | 42 | 4 | 160 | 110 | 40 | 110 | 270 | 1 | 180 | 3160 | 9600 | 0.15 | |
| 10 x (LCEL) | | | 10 | 120 | 15 | 800 | 650 | 400 | 750 | 2000 | 5 | 230 | 5500 | 17000 | 1.5 | |
| Sample Description | | | | | | | | | | | | | | | | |
| ALS Lab ID | Sample ID | Sampling Date | | | | | | | | | | | | | | |
| HK1200967001 | D8 0.00-0.90M | 31/12/2011 | <0.1 | 15 | <0.2 | 33 | 13 | 22 | 24 | 77 | <0.05 | <18 | <550 | <1700 | <0.015 | M |
| HK1200967002 | D8 0.90-1.90M | 31/12/2011 | <0.1 | 16 | <0.2 | 16 | 115 | 9 | 19 | 59 | 0.16 | <18 | <550 | <1700 | <0.015 | H |
| HK1200967003 | D8 1.90-2.90M | 31/12/2011 | <0.1 | 38 | 0.2 | 40 | 12 | 29 | 28 | 97 | <0.05 | <18 | <550 | <1700 | <0.015 | M |

Bold: Value that exceed LCEL

Bold Italic and Underlined: Value that exceed UCEL

Bold and Underlined: Value that exceed 10 x LCEL

Total PCB: Total PCBs calculated through summation of the 18 PCB congeners, based on raw data above the limit of detection of 1ug/kg.
For detailed information on the individual congeners please refer to the certificate of analysis for the work order.

IS Denoted: Insufficient interstitial water generated for TBT analysis.

Category L: Analytical results less than or equal to Lower Chemical Exceedance Level (LCEL)

Category M: Analytical results greater than Lower Chemical Exceedance Level (LCEL), but less than or equal to Upper Chemical Exceedance Level (UCEL)

Category H: Analytical results greater than Upper Chemical Exceedance Level (UCEL)

Category 10xLCEL: Analytical results greater than 10x Lower Chemical Exceedance Level (10xLCEL)

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Sediment Quality Report
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Order No.: CONTRACT NO. GE/2009/16.19
Drillhole: D9

| Analyte Description | | | Silver | Arsenic | Cadmium | Chromium | Copper | Nickel | Lead | Zinc | Mercury | Total Polychlorinated biphenyls | Low M.W. PAHs | High M.W. PAHs | Tributyl Tin | Classification |
|--|---------------|---------------|-----------|------------|------------|------------|------------|------------|------------|-------------|------------|---------------------------------|---------------|----------------|--------------|----------------|
| Unit (In dry Wt basis) | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | µg/kg | µg/kg | µg/kg | ug TBT/L | |
| Reporting Limits | | | 0.1 | 1 | 0.2 | 1 | 1 | 1 | 1 | 1 | 0.05 | 18 | 550 | 1700 | 0.015 | |
| Lower Chemical Exceedance Level (LCEL) | | | 1 | 12 | 1.5 | 80 | 65 | 40 | 75 | 200 | 0.5 | 23 | 550 | 1700 | 0.15 | |
| Upper Chemical Exceedance Level (UCEL) | | | 2 | 42 | 4 | 160 | 110 | 40 | 110 | 270 | 1 | 180 | 3160 | 9600 | 0.15 | |
| 10 x (LCEL) | | | 10 | 120 | 15 | 800 | 650 | 400 | 750 | 2000 | 5 | 230 | 5500 | 17000 | 1.5 | |
| Sample Description | | | | | | | | | | | | | | | | |
| ALS Lab ID | Sample ID | Sampling Date | | | | | | | | | | | | | | |
| HK1200966001 | D9 0.00-0.90M | 30/12/2011 | <0.1 | 24 | <0.2 | 43 | 12 | 29 | 24 | 94 | <0.05 | <18 | <550 | <1700 | <0.015 | M |
| HK1200966002 | D9 0.90-1.90M | 30/12/2011 | <0.1 | 22 | <0.2 | 42 | 12 | 29 | 23 | 92 | <0.05 | <18 | <550 | <1700 | <0.015 | M |
| HK1200966003 | D9 1.90-2.90M | 30/12/2011 | <0.1 | 43 | <0.2 | 44 | 14 | 30 | 27 | 97 | <0.05 | <18 | <550 | <1700 | <0.015 | H |
| HK1200966004 | D9 4.90-5.90M | 30/12/2011 | <0.1 | 83 | <0.2 | 36 | 14 | 23 | 59 | 83 | <0.05 | <18 | <550 | <1700 | <0.015 | H |
| HK1200966005 | D9 6.90-7.90M | 30/12/2011 | 0.2 | 188 | <0.2 | 28 | 15 | 11 | 210 | 54 | <0.05 | <18 | <550 | <1700 | <0.015 | 10xLCEL |

Bold: Value that exceed LCEL

Bold Italic and Underlined: Value that exceed UCEL

Bold and Underlined: Value that exceed 10 x LCEL

Total PCB: Total PCBs calculated through summation of the 18 PCB congeners, based on raw data above the limit of detection of 1 ug/kg.

For detailed information on the individual congeners please refer to the certificate of analysis for the work order.

IS Denoted: Insufficient interstitial water generated for TBT analysis.

Category L: Analytical results less than or equal to Lower Chemical Exceedance Level (LCEL)

Category M: Analytical results greater than Lower Chemical Exceedance Level (LCEL), but less than or equal to Upper Chemical Exceedance Level (UCEL)

Category H: Analytical results greater than Upper Chemical Exceedance Level (UCEL)

Category 10xLCEL: Analytical results greater than 10x Lower Chemical Exceedance Level (10xLCEL)

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT
Sediment Quality Report
Project: AGREEMENT NO CE 15_2010(DS) UPGRADING OF CHEUNG CHAU AND TAI O SEWAGE COLLECTION
Order No.: CONTRACT NO. GE/2009/16.19
Drillhole: D10

| Analyte Description | | | Silver | Arsenic | Cadmium | Chromium | Copper | Nickel | Lead | Zinc | Mercury | Total Polychlorinated biphenyls | Low M.W. PAHs | High M.W. PAHs | Tributyl Tin | Classification |
|--|----------------|---------------|-----------|------------|------------|------------|------------|------------|------------|-------------|------------|---------------------------------|---------------|----------------|--------------|----------------|
| Unit (In dry Wt basis) | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | µg/kg | µg/kg | µg/kg | ug TBT/L | |
| Reporting Limits | | | 0.1 | 1 | 0.2 | 1 | 1 | 1 | 1 | 1 | 0.05 | 18 | 550 | 1700 | 0.015 | |
| Lower Chemical Exceedance Level (LCEL) | | | 1 | 12 | 1.5 | 80 | 65 | 40 | 75 | 200 | 0.5 | 23 | 550 | 1700 | 0.15 | |
| Upper Chemical Exceedance Level (UCEL) | | | 2 | 42 | 4 | 160 | 110 | 40 | 110 | 270 | 1 | 180 | 3160 | 9600 | 0.15 | |
| 10 x (LCEL) | | | 10 | 120 | 15 | 800 | 650 | 400 | 750 | 2000 | 5 | 230 | 5500 | 17000 | 1.5 | |
| Sample Description | | | | | | | | | | | | | | | | |
| ALS Lab ID | Sample ID | Sampling Date | | | | | | | | | | | | | | |
| HK1200964001 | D10 0.00-0.90M | 29/12/2011 | <0.1 | 14 | <0.2 | 48 | 17 | 32 | 31 | 107 | <0.05 | <18 | <550 | <1700 | <0.015 | M |
| HK1200964002 | D10 0.90-1.90M | 29/12/2011 | <0.1 | 11 | <0.2 | 47 | 16 | 32 | 29 | 105 | <0.05 | <18 | <550 | <1700 | <0.015 | L |
| HK1200964003 | D10 1.90-2.90M | 29/12/2011 | <0.1 | 9 | <0.2 | 48 | 16 | 32 | 29 | 106 | <0.05 | <18 | <550 | <1700 | <0.015 | L |
| HK1200964004 | D10 4.90-5.90M | 30/12/2011 | <0.1 | 21 | <0.2 | 47 | 17 | 32 | 31 | 108 | <0.05 | <18 | <550 | <1700 | <0.015 | M |
| HK1200964005 | D10 7.00-7.90M | 30/12/2011 | <0.1 | 44 | <0.2 | 44 | 17 | 29 | 34 | 97 | 0.05 | <18 | <550 | <1700 | <0.015 | H |

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Bold Italic and Underlined: Value that exceed UCEL

Bold and Underlined: Value that exceed 10 x LCEL

Total PCB: Total PCBs calculated through summation of the 18 PCB congeners, based on raw data above the limit of detection of 1 ug/kg.

For detailed information on the individual congeners please refer to the certificate of analysis for the work order.

IS Denoted: Insufficient interstitial water generated for TBT analysis.

Category L: Analytical results less than or equal to Lower Chemical Exceedance Level (LCEL)

Category M: Analytical results greater than Lower Chemical Exceedance Level (LCEL), but less than or equal to Upper Chemical Exceedance Level (UCEL)

Category H: Analytical results greater than Upper Chemical Exceedance Level (UCEL)

Category 10xLCEL: Analytical results greater than 10x Lower Chemical Exceedance Level (10xLCEL)

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Sediment Quality Report
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Order No.: CONTRACT NO. GE/2009/16.19
Drillhole: D11

| Analyte Description | | | Silver | Arsenic | Cadmium | Chromium | Copper | Nickel | Lead | Zinc | Mercury | Total Polychlorinated biphenyls | Low M.W. PAHs | High M.W. PAHs | Tributyl Tin | Classification |
|--|----------------|---------------|-----------|------------|------------|------------|------------|------------|------------|-------------|------------|---------------------------------|---------------|----------------|--------------|----------------|
| Unit (In dry Wt basis) | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | µg/kg | µg/kg | µg/kg | ug TBT/L | |
| Reporting Limits | | | 0.1 | 1 | 0.2 | 1 | 1 | 1 | 1 | 1 | 0.05 | 18 | 550 | 1700 | 0.015 | |
| Lower Chemical Exceedance Level (LCEL) | | | 1 | 12 | 1.5 | 80 | 65 | 40 | 75 | 200 | 0.5 | 23 | 550 | 1700 | 0.15 | |
| Upper Chemical Exceedance Level (UCEL) | | | 2 | 42 | 4 | 160 | 110 | 40 | 110 | 270 | 1 | 180 | 3160 | 9600 | 0.15 | |
| 10 x (LCEL) | | | 10 | 120 | 15 | 800 | 650 | 400 | 750 | 2000 | 5 | 230 | 5500 | 17000 | 1.5 | |
| Sample Description | | | | | | | | | | | | | | | | |
| ALS Lab ID | Sample ID | Sampling Date | | | | | | | | | | | | | | |
| HK1200955001 | D11 0.00-0.90M | 29/12/2011 | 0.2 | 23 | <0.2 | 54 | 40 | 34 | 48 | 138 | 0.15 | <18 | <550 | <1700 | <0.015 | M |
| HK1200955002 | D11 0.90-1.90M | 29/12/2011 | 0.2 | 27 | <0.2 | 61 | 43 | 39 | 51 | 150 | 0.13 | <18 | <550 | <1700 | <0.015 | M |
| HK1200955003 | D11 1.90-2.90M | 29/12/2011 | 0.2 | 30 | <0.2 | 66 | 52 | 42 | 54 | 158 | 0.16 | <18 | <550 | <1700 | <0.015 | H |
| HK1200955004 | D11 4.90-5.90M | 29/12/2011 | <0.1 | 10 | <0.2 | 46 | 16 | 30 | 30 | 102 | <0.05 | <18 | <550 | <1700 | <0.015 | L |
| HK1200955005 | D11 6.90-7.90M | 29/12/2011 | <0.1 | 15 | <0.2 | 48 | 18 | 32 | 32 | 108 | 0.05 | <18 | <550 | <1700 | <0.015 | M |

Bold: Value that exceed LCEL

Bold Italic and Underlined: Value that exceed UCEL

Bold and Underlined: Value that exceed 10 x LCEL

Total PCB: Total PCBs calculated through summation of the 18 PCB congeners, based on raw data above the limit of detection of 1 ug/kg.

For detailed information on the individual congeners please refer to the certificate of analysis for the work order.

IS Denoted: Insufficient interstitial water generated for TBT analysis.

Category L: Analytical results less than or equal to Lower Chemical Exceedance Level (LCEL)

Category M: Analytical results greater than Lower Chemical Exceedance Level (LCEL), but less than or equal to Upper Chemical Exceedance Level (UCEL)

Category H: Analytical results greater than Upper Chemical Exceedance Level (UCEL)

Category 10xLCEL: Analytical results greater than 10x Lower Chemical Exceedance Level (10xLCEL)