## Annex B

## Environmental Mitigation Implementation Schedule

## Annex B Environmental Mitigation Implementation Schedule

| EIA Ref.    | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the<br>Recommended<br>Measure & Main<br>Concerns to address | Location of<br>the Measures | Who to implement the measure? | the m | easure | olement<br>? <sup>(1)</sup><br>/R A | What requirements or standards for the measure to achieve? | Implementation<br>Status and Remarks                         |
|-------------|-------------|--|---|-----------------------------|-------------------------------|-------|--------|-------------------------------------|--|--|
| Air Quali   | ty - Cons   | truction Phase   |   |                             |                               |       |        |                                     |  |  |
| 4.8.1       | AQ1         | Blasting   | To minimise potential   | Blasting area               | SENTX                         | ,     | ✓      |                                     | Air Pollution Control                                      | Not applicable.  |
|             |             | • The area within 30m of the blasting area will be wetted prior to blasting.   | dust nuisance   | and 30m of<br>blasting area | Contractor                    |       |        |                                     | (Construction Dust)<br>Regulations                         | Blasting is not required in the latest landfill design       |
|             |             | <ul> <li>Blasting will not be carried out when<br/>the strong wind signal or tropical<br/>cyclone warning signal No. 3 or<br/>higher is hoisted, unless this is with<br/>the express prior permission of the<br/>Commissioner of Mines.</li> </ul> |   |                             |                               |       |        |                                     |  |  |
|             |             | <ul> <li>loose material and stones in the Site<br/>will be removed prior to the blast<br/>operation</li> </ul>   |   |                             |                               |       |        |                                     |  |  |
|             |             | <ul> <li>During blasting, blast nets, screens<br/>and other protective covers will be<br/>used to prevent the projection of<br/>flying fragments and material<br/>resulting from blasting</li> </ul>   |   |                             |                               |       |        |                                     |  |  |
| 4.8.1       | AQ2         | Rock Drilling  | To minimise potential   | Ŭ                           | SENTX                         | ,     | ✓      |                                     | Air Pollution Control                                      | Not applicable. Rock   |
|             |             | <ul> <li>Watering will be carried out at the<br/>rock drilling activities to avoid<br/>fugitive dust emissions.</li> </ul>   | dust nuisance   | area                        | Contractor                    |       |        |                                     | (Construction Dust)<br>Regulations                         | drilling is not required<br>in the latest landfill<br>design |
| (1) D=Desig | gn; C=Const | ruction; O/R=Operation/Restoration; A=Aftercare  |   |                             |                               |       |        |                                     |  |  |

| EIA Ref. | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the<br>Recommended<br>Measure & Main<br>Concerns to address | Location of the Measures          | Who to implement the measure? |          | impleme<br>sure? <sup>(1)</sup><br>O/R | What requirements or standards for the measure to achieve?                                   | Implementation<br>Status and Remarks                              |
|----------|-------------|--|---|-----------------------------------|-------------------------------|----------|--|--|---|
| 4.8.1    | AQ3         | <ul> <li>Site Access Road</li> <li>The main haul road will be kept clear of dusty materials or sprayed with water.</li> <li>The main haul road will be paved with aggregate or gravel.</li> <li>Vehicle speed will be limited to 10kph.</li> </ul> | To minimise potential dust nuisance                                       | Main haul<br>road                 | SENTX<br>Contractor           | <b>✓</b> |  | Air Pollution Control<br>(Construction Dust)<br>Regulations<br>HKAQO and EIAO-<br>TM Annex 4 | Implemented   |
| 4.8.1    | AQ4         | Stockpiling of Dusty Materials  • Any stockpile of dusty materials will be covered entirely by impervious sheeting or placed in an area sheltered on the top and three sides or sprayed with water so as to ensure that the entire surface is wet. | To minimise potential dust nuisance                                       | All<br>construction<br>works area | SENTX<br>Contractor           | ✓        |  | Air Pollution Control<br>(Construction Dust)<br>Regulations<br>HKAQO and EIAO-<br>TM Annex 4 | Implemented   |
| 4.8.1    | AQ5         | <ul> <li>Loading, unloading or transfer of dusty materials</li> <li>All dusty materials will be sprayed with water immediately prior to any loading, unloading or transfer operation so as to maintain the dusty material wet.</li> </ul>          | To minimise potential dust nuisance                                       | All<br>construction<br>works area | SENTX<br>Contractor           | ✓        |  | Air Pollution Control<br>(Construction Dust)<br>Regulations<br>HKAQO and EIAO-<br>TM Annex 4 | Deficiency of mitigation measures but rectified by the Contractor |
| 4.8.1    | AQ6         | <ul> <li>Site Boundary and Entrance</li> <li>Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of height not less than 2.4m from</li> </ul>  | To minimise potential dust nuisance                                       | Site boundary<br>and entrance     | SENTX<br>Contractor           | ✓        |  | Air Pollution Control<br>(Construction Dust)<br>Regulations<br>HKAQO and EIAO-               | Not applicable  |

| EIA Ref. | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the<br>Recommended<br>Measure & Main<br>Concerns to address | Location of the Measures          | Who to implement the measure? | the m | easu     | mplemo<br>ure? <sup>(1)</sup><br>O/R | What requirements or standards for the measure to achieve?                                   | Implementation<br>Status and Remarks |
|----------|-------------|--|---|-----------------------------------|-------------------------------|-------|----------|--------------------------------------|--|--------------------------------------|
|          |             | ground level will be provided along<br>the entire length of that portion of the<br>site boundary except for the site<br>entrance or exit.  |   |                                   |                               |       |          |                                      | TM Annex 4   |                                      |
| 4.8.1    | AQ7         | <ul> <li>Excavation Works</li> <li>Working area of any excavation or earth moving operation will be sprayed with water immediately before, during and immediately after the operation so as to ensure that the entire surface is wet.</li> </ul>   | To minimise potential dust nuisance                                       | All<br>construction<br>works area | SENTX<br>Contractor           | ,     | ✓        |                                      | Air Pollution Control<br>(Construction Dust)<br>Regulations<br>HKAQO and EIAO-<br>TM Annex 4 | Not applicable                       |
| 4.8.1    | AQ8         | <ul> <li>Building Demolition</li> <li>The area where the demolition works are planned to take place will be sprayed with water immediately prior to, during and immediately after the demolition activities.</li> <li>Any dusty materials remaining after a stockpile is removed will be wetted with water and cleared from the surface of roads or street.</li> </ul> | To minimise potential dust nuisance                                       | All construction works area       | SENTX<br>Contractor           | ,     | <b>~</b> |                                      | Air Pollution Control<br>(Construction Dust)<br>Regulations<br>HKAQO and EIAO-<br>TM Annex 4 | Not applicable                       |
| 4.8.1    | AQ9         | <ul> <li>Construction of the Superstructure of Building</li> <li>Effective dust screens, sheeting or netting will be provided to enclose the scaffolding from the ground level up to the highest level of the scaffolding.</li> </ul>  | To minimise potential dust nuisance                                       | All<br>construction<br>works area | SENTX<br>Contractor           | ,     | <b>√</b> |                                      | Air Pollution Control<br>(Construction Dust)<br>Regulations<br>HKAQO and EIAO-<br>TM Annex 4 | Implemented                          |

| EIA Ref. | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures   | Objectives of the Recommended   | Location of the Measures                             | Who to implement    |   |   | implei<br>ure? <sup>(1)</sup> |   | What requirements or standards for the  | Implementation<br>Status and Remarks  |
|----------|-------------|---|---|--|---------------------|---|---|-------------------------------|---|---|---|
|          |             |   | Measure & Main<br>Concerns to address   |  | the measure?        | D | С | O/R                           | A | measure to achieve?   |   |
| 4.8.1    | AQ10        | Should a stone crushing plant be needed on site, the control measures recommended in the Best Practicable Means Requirement for Mineral Works (Stone Crushing Plants) BPM 11/1 should be implemented. | To minimise potential dust nuisance   | Stone<br>crushing<br>plant/<br>construction<br>phase | SENTX<br>Contractor |   | ✓ |                               |   | Best Practicable Means<br>Requirement for<br>Mineral Works (Stone<br>Crushing Plants) BPM<br>11/1 | Not applicable. Stone<br>crushing plant is not<br>required in the latest<br>landfill design |
| 4.8.1    | AQ11        | Good site practices such as regular maintenance and checking of the diesel powered mechanical equipment will be adopted to avoid any black smoke emissions and to minimize gaseous emissions.         | To minimise potential dust nuisance   | All<br>construction<br>works area                    | SENTX<br>Contractor |   | ✓ |                               |   | HKAQO and EIAO-<br>TM Annex 4   | Deficiency of<br>mitigation measures<br>but rectified by the<br>Contractor                  |
| 4.10.1   | AQ12        | Dust monitoring once every 6 days   | Ensure the dust<br>generated from the<br>project meets the air<br>quality requirement | At monitoring locations shown in <i>Figure 3.2a</i>  | SENTX<br>Contractor |   | ✓ |                               |   | HKAQO and EIAO-<br>TM Annex 4   | Implemented   |
| 4.10.2   | AQ41        | Monitoring of ambient TSP once every 6 days   | Ensure the dust<br>emission from the<br>project meets the dust<br>requirement         | At monitoring locations shown in Figure 11.3a        | SENTX<br>Contractor |   | ✓ | <b>✓</b>                      |   | HKAQO and EIAO-<br>TM Annex 4   | Implemented   |
| 4.10.2   | AQ46        | Monitoring of meteorological station, continuously  | Collect site specific meteorological data   | At meteorologica l station shown in Figure 11.3a     | SENTX<br>Contractor |   | ✓ | ✓                             | ✓ | -   | Implemented   |

| EIA Ref. | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures   | Objectives of the<br>Recommended<br>Measure & Main<br>Concerns to address | Location of<br>the Measures       | Who to implement the measure? |          | imple<br>sure? <sup>(1)</sup><br>O/R | ) | What requirements or standards for the measure to achieve? | Implementation<br>Status and Remarks |
|----------|-------------|---|---|-----------------------------------|-------------------------------|----------|--------------------------------------|---|--|--------------------------------------|
| 5.7.1    | N1          | Adopt good site practice listed below:     Only well-maintained plant will be operated on-site and plant should be serviced regularly during the construction program;                    | To minimise potential construction noise nuisance.                        | All<br>construction<br>works area | SENTX<br>Contractor           | <b>√</b> |                                      |   | Noise Control<br>Ordinance (NCO) and<br>EIAO-TM Annex 5    | Implemented                          |
|          |             | Silencers or mufflers on construction<br>equipment should be utilized and will<br>be properly maintained during the<br>construction program;  |   |                                   |                               |          |                                      |   |  |                                      |
|          |             | • Mobile plant, if any, will be sited as far from NSRs as possible;   |   |                                   |                               |          |                                      |   |  |                                      |
|          |             | Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or should be throttled down to a minimum;                                      |   |                                   |                               |          |                                      |   |  |                                      |
|          |             | Plant known to emit noise strongly in<br>one direction will, wherever possible,<br>be orientated so that the noise is<br>directed away from the nearby NSRs;<br>and                       |   |                                   |                               |          |                                      |   |  |                                      |
|          |             | <ul> <li>Material stockpiles and other<br/>structures will be effectively utilised,<br/>wherever practicable, in screening<br/>noise from on-site construction<br/>activities.</li> </ul> |   |                                   |                               |          |                                      |   |  |                                      |

| EIA Ref.  | EM&A<br>Ref       | Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the Recommended                                       | Location of the Measures                     | Who to implement    |   |   | implement | What requirements or standards for the                  | Implementation<br>Status and Remarks |
|-----------|-------------------|--|---|--|---------------------|---|---|-----------|---|--------------------------------------|
|           |                   |  | Measure & Main<br>Concerns to address                               |  | the measure?        | D | С | O/R A     | measure to achieve?                                     |                                      |
| 5.8       | N2                | Weekly noise monitoring  | Ensure noise<br>generated from the<br>project meets the<br>criteria | At monitoring locations shown in Figure 6.4a | SENTX<br>Contractor |   | ✓ |           | Noise Control<br>Ordinance (NCO) and<br>EIAO-TM Annex 5 | Implemented                          |
| Water Qua | ality <b>-</b> Co | nstruction Phase   |   |  |                     |   |   |           |   |                                      |
| 6.8.1     | WQ1               | Construction Runoff  |   |  |                     |   |   |           |   |                                      |
|           |                   | • Exposed soil areas will be minimised   | To minimise potential   |  | SENTX               |   | ✓ |           | ProPECC PN 1/94   | Implemented                          |
|           |                   | to reduce the contamination of runoff and erosion.   | water quality impacts<br>arising from the<br>construction works     | construction<br>works area                   | Contractor          |   |   |           | EIAO-TM Annex 6   |                                      |
| 6.8.1     | WQ2               | Perimeter channels will be   | To minimise potential   |  | SENTX               | ✓ | ✓ |           | ProPECC PN 1/94   | Implemented                          |
|           |                   | constructed in advance of site<br>formation works and earthworks and<br>intercepting channels will be provided | water quality impacts<br>arising from the<br>construction works     | construction<br>works area                   | Contractor          |   |   |           | Water Pollution<br>Control Ordinance<br>(WPCO)          |                                      |
|           |                   | for example along the edge of excavation.  |   |  |                     |   |   |           | EIAO-TM Annex 6   |                                      |
| 6.8.1     | WQ3               | Silt removal facilities, channels and  | To minimise potential   | All  | SENTX               |   | ✓ |           | ProPECC PN 1/94   | Reminder was given to                |
|           |                   | manholes will be maintained and the deposited silt and grit should be  | water quality impacts arising from the                              | construction<br>works area                   | Contractor          |   |   |           | WPCO  | the Contractor                       |
|           |                   | removed regularly to ensure they are functioning properly at all times.  | construction works  | works area                                   |                     |   |   |           | EIAO-TM Annex 6   |                                      |
| 6.8.1     | WQ4               | Temporary covers such as tarpaulin   | To minimise potential   |  | SENTX               |   | ✓ |           | ProPECC PN 1/94   | Implemented                          |
|           |                   | will also be provided to minimise the generation of high SS runoff.  | water quality impacts<br>arising from the<br>construction works     | construction<br>works area                   | Contractor          |   |   |           | WPCO  |                                      |
| 6.8.1     | WQ5               | The surface runoff contained any oil   | To minimise potential   | All  | SENTX               |   | ✓ |           | ProPECC PN 1/94   | Implemented                          |

| EIA Ref. | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures   | Objectives of the Recommended   | Location of the Measures   | Who to implement |   |   | implei<br>ure? <sup>(1)</sup> | What requirements or standards for the | Implementation<br>Status and Remarks           |  |
|----------|-------------|---|---|----------------------------|------------------|---|---|-------------------------------|--|--|--|
|          |             | <b>g</b>  | Measure & Main<br>Concerns to address   |                            | the measure?     | D | С | O/R                           | measure to achieve?                    |  |  |
|          |             | and grease will pass through the oil  | water quality impacts arising from the  | construction<br>works area | Contractor       |   |   |                               | WPCO                                   |  |  |
|          |             | interceptors.   | construction works  | works area                 |                  |   |   |                               | EIAO-TM Annex 6                        |  |  |
| 6.8.1    | WQ6         | • All sewer and drains will be sealed to  | To minimise potential   |                            | SENTX            |   | ✓ |                               | ProPECC PN 1/94                        | Not applicable                                 |  |
|          |             | prevent building debris, soil etc from entering public sewers/drains before   | water quality impacts arising from the  | area at existing SENT      | Contractor       |   |   |                               | WPCO                                   |  |  |
|          |             | commencing any demolition works   | demolition works  | Landfill                   |                  |   |   |                               | EIAO-TM Annex 6                        |  |  |
| 6.8.1    | WQ7         | During the excavation works for the   | To minimise potential   | Tunnel boring              |                  |   | ✓ |                               | ProPECC PN 1/94                        | Not applicable.                                |  |
|          |             | twin drainage tunnels, the recycle water for cooling the cutter head of   | water quality impacts arising from the  | sites                      | Contractor       |   |   |                               | WPCO                                   | Excavation of drainage tunnels is not required |  |
|          |             | the TBM will be conveyed to the sedimentation tanks for treatment and most of the treated water will be reused, where applicable and as much as possible, in the boring operations. | tunnel works  |                            |                  |   |   |                               | EIAO-TM Annex 6                        | in the latest landfill design.                 |  |
| 6.8.1    | WQ8         | • The fuel and waste lubricant oil from   | To minimise potential   | SENTX Site                 | SENTX            |   | ✓ |                               | ProPECC PN 1/94                        | Implemented                                    |  |
|          |             | the on-site maintenance of machinery and equipment will be collected by a   | water quality impacts arising from improper   |                            | Contractor       |   |   |                               | WPCO                                   |  |  |
|          |             | licensed chemical waste collector.  | handling of fuel and oil  |                            |                  |   |   |                               | Waste Disposal<br>Ordinance (WDO)      |  |  |
| 6.8.1    | WQ9         | Implementation of excavation  | To minimise   | All                        | SENTX            |   | ✓ |                               | ProPECC PN 1/94                        | Implemented                                    |  |
|          |             | schedules, lining and covering of excavated stockpiles  | contaminated<br>stormwater run-off  | construction<br>works      | Contractor       |   |   |                               | WPCO                                   |  |  |
|          |             | excavated stockpiles  | from the SENTX Site   | WOIRS                      |                  |   |   |                               | EIAO-TM Annex 6                        |  |  |
| 6.13     | WQ10        | Monitoring of surface water quality   | To minimise potential   | SENTX Site                 | SENTX            |   | ✓ |                               | WPCO                                   | Implemented                                    |  |
|          |             | will be conducted on a regular basis as stated in the EM&A Manual.  | water quality impacts<br>on surface water<br>arising from the<br>construction works |                            | Contractor       |   |   |                               | Water-TM                               |  |  |

| EIA Ref. | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the<br>Recommended<br>Measure & Main                            | Location of the Measures                    | Who to implement the measure? |   |   | implement<br>ure? (1)<br>O/R A | What requirements or standards for the measure to achieve?                       | Implementation<br>Status and Remarks                      |
|----------|-------------|--|---|---|-------------------------------|---|---|--------------------------------|--|---|
|          |             |  | Concerns to address   |   |                               |   |   |                                |  |   |
| 6.8.2    | WQ11        | Sewage Effluents   |   |   |                               |   |   |                                |  |   |
|          |             | • Sufficient chemical toilets will be provided for the construction workforce.   | To minimise potential water quality impacts arising from the sewage effluents | SENTX Site                                  | SENTX<br>Contractor           |   | ✓ |                                | WPCO   | Implemented   |
| 6.8.2    | WQ12        | • Untreated sewage will not be allowed   | To minimise potential   | SENTX Site                                  | SENTX                         |   | ✓ |                                | WPCO   | Deficiency of   |
|          |             | to discharge into the surrounding water body.  | water quality impacts<br>arising from the<br>sewage effluents                 |   | Contractor                    |   |   |                                | WDO  | mitigation measures<br>but rectified by the<br>Contractor |
| 6.8.2    | WQ13        | A licensed waste collector will be   | To minimise potential   | SENTX Site                                  | SENTX                         |   | ✓ |                                | WPCO   | Implemented   |
|          |             | employed to clean the chemical toilets on a regular basis.   | water quality impacts<br>arising from the<br>sewage effluents                 |   | Contractor                    |   |   |                                | WDO  |   |
| Waste Ma | nagement    | - Construction Phase   |   |   |                               |   |   |                                |  |   |
| 7.6.1    | WM1         | All the necessary waste disposal permits are obtained prior to the commencement of construction work.  | To ensure compliance<br>with relevant<br>statutory<br>requirements            | Before<br>construction<br>works<br>commence | SENTX<br>Contractor           | ✓ | ✓ |                                | WDO  | Implemented   |
| 7.6.1    | WM2         | Management of Waste Disposal   |   |   |                               |   |   |                                |  |   |
|          |             | The construction contractor will open a  | To ensure that  | SENTX Site                                  | SENTX                         |   | ✓ |                                | WDO  | Implemented   |
|          |             | billing account with the EPD. Every construction waste or public fill load to be transferred to the Government waste disposal facilities such as public fill reception facilities, sorting facilities, | adverse<br>environmental<br>impacts are prevented                             |   | Contractor                    |   |   |                                | Waste Disposal<br>(Charges for Disposal<br>of Construction Waste)<br>Regulation; |   |
|          |             | landfills will required a valid "chit" which contains the information of the account holder to facilitate waste  |   |   |                               |   |   |                                | Works Bureau<br>Technical Circular<br>No.31/2004; and                            |   |

| EIA Ref. | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures   | Objectives of the Recommended                     | Location of the Measures | Who to implement    | the me | o implement<br>asure? <sup>(1)</sup> | or standards for the  | Implementation<br>Status and Remarks                                       |
|----------|-------------|---|---|--------------------------|---------------------|--------|--------------------------------------|---|--|
|          |             |   | Measure & Main<br>Concerns to address             |                          | the measure?        | D C    | O/R A                                | measure to achieve?   |  |
|          |             | transaction recording and billing to the waste producer. A trip-ticket system will also be established to monitor the disposal of construction waste at the SENT Landfill and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.                     |   |                          |                     |        |                                      | Annex 5 and Annex 6 of Appendix G of ETWBTC No. 19/2005)                        |  |
|          |             | A recording system for the amount of waste generated, recycled and disposed of (including the disposal sites) will be established.  |   |                          |                     |        |                                      |   |  |
| 7.6.1    | WM3         | Measures for the Reduction of Construction Waste Generation   |   |                          |                     |        |                                      |   |  |
|          |             | Inert and non-inert construction waste will be segregated and stored in different containers or skips to facilitate reuse or recycling of the inert waste and proper disposal of the non-inert construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable. | To reduce construction waste generation           | SENTX Site               | SENTX<br>Contractor | ✓      |                                      | WDO<br>EIAO-TM Annex 7  | Implemented  |
| 7.6.1    | WM4         | <u>Chemical Waste</u>   |   |                          |                     |        |                                      |   |  |
|          |             | The construction contractor will register as a chemical waste producer with the EPD. Chemical waste will be handled in accordance with the <i>Code of Practice on the Packaging, Handling and Storage of</i>  | To ensure proper<br>handling of chemical<br>waste | SENTX Site               | SENTX<br>Contractor | ✓      |                                      | WDO  Code of Practice on the Packaging, Handling and Storage of Chemical Wastes | Deficiency of<br>mitigation measures<br>but rectified by the<br>Contractor |

| EIA Ref.                               | Ref | Environmental Protection Measures/ Mitigation Measures  Chemical Wastes.  | Objectives of the<br>Recommended<br>Measure & Main<br>Concerns to address | Location of<br>the Measures | Who to implement the measure? |   | to impleme<br>asure? <sup>(1)</sup><br>O/R | or standards      | for the | Implementation<br>Status and Remarks                                       |
|--|-----|---|---|-----------------------------|-------------------------------|---|--|-------------------|---------|--|
| 7.6.1                                  | WM5 | Sewage  An adequate number of portable toilets will be provided at the site to ensure that sewage from site staff is properly collected. The portable toilets will be desludged and maintained regularly by a specialist contractor.  | To ensure proper handling of sewage                                       | SENTX Site                  | SENTX<br>Contractor           | ✓ |  | WDO<br>EIAO-TM An | inex 7  | Implemented  |
| 7.6.1 and<br>SENTX<br>latest<br>design | WM6 | General Refuse  General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered to a transfer station or other landfill, separately from construction and chemical wastes, on a daily basis to reduce odour, pest and litter impacts. | To ensure proper<br>handling of general<br>refuse                         | SENTX Site                  | SENTX<br>Contractor           | ✓ |  | WDO<br>EIAO-TM An | inex 7  | Deficiency of<br>mitigation measures<br>but rectified by the<br>Contractor |
| 7.6.1                                  | WM7 | Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the SENTX Site. Materials recovered will be sold for recycling.  Staff Training   |   |                             |                               |   |  |                   |         |  |
|  |     | At the commencement of the construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including   | To ensure that<br>adverse<br>environmental<br>impacts are prevented       | SENTX Site                  | SENTX<br>Contractor           | ✓ |  |                   |         | Implemented  |

| EIA Ref.                               | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures   | Objectives of the Recommended                | Location of the Measures                                      | Who to implement    |   |          | implement<br>ure? <sup>(1)</sup> | What requirements or standards for the  | Implementation<br>Status and Remarks |
|--|-------------|---|--|---|---------------------|---|----------|----------------------------------|---|--------------------------------------|
|  |             |   | Measure & Main<br>Concerns to address        |   | the measure?        | D | С        | O/R A                            | measure to achieve?   |                                      |
|  |             | waste reduction, reuse and recycling.   |  |   |                     |   |          |                                  |   |                                      |
| 7.8                                    | WM8         | Environmental Monitoring & Audit Requirements   | To ensure that                               | SENTX Site  | SENTX               |   | <b>√</b> |                                  | WDO   | Implemented                          |
|  |             | Weekly audits of the waste management practices will be carried out during the construction phase. The audits examine all aspects of waste management including waste generation, storage, recycling, transport and disposal.   | adverse<br>environmental                     |   | Contractor          |   |          |                                  |   |                                      |
| Landfill G                             | Gas Hazar   | ds - Design and Construction Phase  |  |   |                     |   |          |                                  |   |                                      |
| 8.6.2 and<br>SENTX<br>latest<br>design | LFG1        | Precautionary measures to be adopted by the contractors at the Project site and the adjacent development site within the landfill consultation zone are outlined in Paragraphs 8.3 to 8.49 of EPD's Landfill Gas Hazard Assessment Guidance Notes (the Guidance Note). Those precautionary measures applicable to the SENTX will be confirmed in the detailed Qualitative Landfill Gas Hazard Assessment to be submitted by the contractor. | -  | All<br>construction<br>works area                             | SENTX<br>Contractor |   | <b>✓</b> |                                  | Paragraphs 8.3 to 8.49<br>of EPD's Landfill Gas<br>Hazards Assessment<br>Guidance Note<br>EIAO-TM Annex 7 | Implemented                          |
| 8.6.2                                  | LFG2        | Monitoring will be undertaken when construction works are carried out in confined space within the consultation zone with reference to the monitoring requirements and procedures specified in Paragraphs 8.23 to 8.28 of EPD's <i>Guidance Note</i> will be followed.  | To protect workers<br>from landfill gas risk | Confined<br>space within<br>the<br>construction<br>works area | SENTX<br>Contractor |   | ✓        |                                  |   | Implemented                          |

| EIA Ref. | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures   | Recommended the Measures impl             |  | es implement the measure |   |          | hen to implement e measure? (1) |   | What requirements or standards for the                                       | he Status and Remarks |
|----------|-------------|---|---|--|--------------------------|---|----------|---------------------------------|---|--|-----------------------|
|          |             |   | Measure & Main<br>Concerns to address     | •••• ••• ••• ••• ••• ••• ••• ••• ••• • | the measure?             |   |          | O/R                             |   | measure to achieve?  |                       |
|          |             | In the event of the trigger levels being exceeded, it is recommended that a person, such as the Safety Officer, is nominated, with deputies, to be responsible for dealing with any emergency which may occur due to landfill gas. In an emergency situation, the nominated person, or his deputies, shall have the necessary authority and shall ensure that the confined space is evacuated and the necessary works implemented for reducing the concentrations of gas. The appropriate organisations shall be contact. |   |  |                          |   |          |                                 |   |  |                       |
| 8.6.3    | LFG4        | Implementation of engineering measures according to Contract Specification requirements. These measures will include the placement of liner and installation of landfill gas management system to contain, manage and control landfill gas.   | To protect workers from landfill gas risk | SENTX Site                             | SENTX<br>Contractor      | ✓ | <b>√</b> | <b>√</b>                        | ✓ | EIAO-TM Annex 7  | Implemented           |
| 8.6.3    | LFG5        | Engineering measures to significant engineering measures will be required in the design of the SENTX to protect the staff working in the infrastructure area. These measures include a combination of passive and active systems (examples are recommended in EPD's <i>Guidance Notes</i> ). Landfill gas monitoring boreholes will be installed at the edge of the waste slope   | · ·                                       | Infrastructure<br>Area                 | SENTX<br>Contractor      | ✓ | <b>✓</b> |                                 |   | EPD's Landfill Gas<br>Hazards Assessment<br>Guidance Note<br>EIAO-TM Annex 7 | Implemented           |

| EIA Ref.  | EM&A<br>Ref | Mitigation Measures   | ,  | Location of the Measures   | Who to implement |   | implement<br>ure? (1) | What requirements or standards for the         | Implementation<br>Status and Remarks   |
|-----------|-------------|---|--|----------------------------|------------------|---|-----------------------|--|--|
|           | Kei         |   |  | the Weasures               | the measure?     |   | O/R A                 | measure to achieve?                            |  |
|           |             | between the waste and the new infrastructure area to monitor the migration of landfill gas, if any.   |  |                            |                  |   |                       |  |  |
| Ecology – | Construc    | tion Phase  |  |                            |                  |   |                       |  |  |
| 9.10.2    | EC1         | Measures to control construction runoff:  |  |                            | SENTX            | ✓ |                       | EIAO-TM Annex 16                               | Implemented                            |
|           |             | • Exposed soil areas will be  | water quality impacts affecting ecological | construction<br>works area | Contractor       |   |                       | ProPECC PN 1/94                                |  |
|           |             | minimised to reduce the contamination of runoff and erosion;  | resources                                  |                            |                  |   |                       | Water Pollution<br>Control Ordinance<br>(WPCO) |  |
|           |             |   |  |                            |                  |   |                       | EIAO-TM Annex 6                                |  |
|           |             | <ul> <li>To prevent stormwater runoff from<br/>washing across exposed soil<br/>surfaces, perimeter channels will be<br/>constructed in advance of site<br/>formation works and earthworks<br/>and intercepting channels will be<br/>provided for example along the<br/>edge of excavation;</li> </ul> |  |                            |                  |   |                       | -  | Implemented                            |
|           |             | <ul> <li>Silt removal facilities, channels and<br/>manholes will be maintained and<br/>the deposited silt and grit will be<br/>removed regularly to ensure they<br/>are functioning properly at all<br/>times;</li> </ul>   |  |                            |                  |   |                       | -  | Reminder was given t<br>the Contractor |
|           |             | <ul> <li>Temporary covers such as tarpaulin<br/>will also be provided to minimise<br/>the generation of high suspended<br/>solids runoff;</li> </ul>  |  |                            |                  |   |                       | -  | Implemented                            |

| EIA Ref.                  | EM&A<br>Ref | A Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the   | ,            | Who to implement    |          | mpler    |          | What requirements or standards for the measure to achieve? | Implementation<br>Status and Remarks |
|---------------------------|-------------|--|---|--------------|---------------------|----------|----------|----------|--|--------------------------------------|
|                           |             |  | Measure & Main Concerns to address                                | the weasures | the measure?        |          | O/R      |          |  |                                      |
|                           |             | <ul> <li>The surface runoff contained any<br/>oil and grease will pass through the<br/>oil interceptors; and,</li> </ul>   |   |              |                     |          |          |          | -  | Not applicable                       |
|                           |             | <ul> <li>Control measures, including<br/>implementation of excavation<br/>schedules, lining and covering of<br/>excavated stockpiles will be<br/>implemented to minimise<br/>contaminated stormwater run-off<br/>from the SENTX site.</li> </ul> |   |              |                     |          |          |          | -  | Implemented                          |
| 9.10.2 and                | EC2         | Good Construction Practice:  |   |              |                     |          |          |          |  |                                      |
| SENTX<br>latest<br>design |             | <ul> <li>Fences along the boundary of the<br/>SENTX Site will be erected before<br/>the commencement of works to<br/>prevent vehicle movements, and<br/>encroachment of personnel, onto<br/>adjacent areas.</li> </ul>                           | To minimise potential ecological impacts arising from the Project | SENTX Site   | SENTX<br>Contractor | <b>√</b> |          |          | EIAO-TM Annex 16   | Implemented                          |
|                           |             | <ul> <li>The work site boundaries will be<br/>regularly checked to ensure that<br/>they are not breached and that<br/>damage does not occur to<br/>surrounding areas.</li> </ul>   |   |              |                     |          |          |          |  |                                      |
| 9.12.1                    | EC9         | Environmental Monitoring & Audit<br>Requirements   |   |              |                     |          |          | ,        | EIAO-TM Annex 16   |                                      |
|                           |             | The implementation of the ecological mitigation measures should be checked as part of the environmental monitoring and audit procedures during the   | To ensure that adverse ecological impacts are prevented           | SENTX        | SENTX<br>Contractor | <b>√</b> | <b>✓</b> | <b>✓</b> |  | Implemented                          |

| EIA Ref.  | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the<br>Recommended<br>Measure & Main | Location of the Measures          | Who to implement the measure? |   | meas     | implement<br>sure? (1)<br>O/R A | What requirements or standards for the measure to achieve? | Implementation<br>Status and Remarks |
|-----------|-------------|--|--|-----------------------------------|-------------------------------|---|----------|---------------------------------|--|--------------------------------------|
|           |             |  | Concerns to address                                |                                   |                               |   |          |                                 |  |                                      |
|           |             | construction period.   |  |                                   |                               |   |          |                                 |  |                                      |
| Landscape | e and Visu  | aal - Construction Phase   |  |                                   |                               |   |          |                                 |  |                                      |
| 10.6.5    | LV1         | CM1 - The construction area and area allowed for the contractor's office, leachate treatment plant and laboratory areas will be minimised to a practical minimum, to avoid impacts on adjacent landscape.  | To minimise the landscape and visual impacts       | SENTX Site                        | SENTX<br>Contractor           |   | <b>√</b> |                                 | EIAO-TM Annex 18<br>and ETWBC 3/2006                       | Implemented                          |
| 10.6.5    | LV2         | CM2 - Topsoil, where identified, will be stripped and stored for re-use in the construction of the soft landscape works, where practical. The Contract Specification will include storage and reuse of topsoil as appropriate.   | To minimise the landscape and visual impacts       | All<br>construction<br>works area | SENTX<br>Contractor           |   | <b>✓</b> |                                 | EIAO-TM Annex 18   | Not applicable                       |
| 10.6.5    | LV3         | CM3 - All existing trees at the edges of the landfill will be carefully protected during construction. Detailed Tree Protection Specification will be provided in the Contract Specification. Under this Specification, the Contractor will be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in Contractor's works areas. | To minimise the landscape and visual impacts       | Potential impacted area           | SENTX<br>Contractor           |   | ✓        |                                 | EIAO-TM Annex 18<br>and ETWBC 3/2006                       | Not applicable                       |
| 10.6.5    | LV4         | CM4 - Trees unavoidably affected by the works will be transplanted, where necessary and practical. A detailed Tree   | landscape and visual                               | Potential impacted area           | SENTX<br>Contractor           | ✓ | ✓        |                                 | EIAO-TM Annex 18<br>and ETWBC 3/2006                       | Implemented                          |

| EIA Ref.                                | EM&A<br>Ref | Mitigation Measures  | Objectives of the Recommended                | Location of the Measures             |                     |          |          | implement<br>sure? (1) | What requirements or standards for the | Implementation<br>Status and Remarks |
|---|-------------|--|--|--------------------------------------|---------------------|----------|----------|------------------------|--|--------------------------------------|
|   |             |  | Measure & Main<br>Concerns to address        |                                      | the measure?        | D        | С        | O/R A                  | measure to achieve?                    |                                      |
|   |             | Transplanting Specification will be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods will be allowed in the project programme.   |  |                                      |                     |          |          |                        |  |                                      |
| 10.6.5 and<br>SENTX<br>latest<br>design | LV5         | CM5 - Within 3 months of taking possession of the SENTX Site, the Contractor will plant advance screen planting of native species at Light Standard size at 1.5m centres along the High Junk Peak Trail so as to screen views of the Works from the trail. Tree planting locations will be agreed with AFCD. Works will be completed within 9 months of taking possession of the SENTX Site. | To minimise the landscape and visual impacts | At High Junk<br>Peak Hiking<br>Trail | SENTX<br>Contractor |          | ✓        |                        | EIAO-TM Annex 18                       | Implemented                          |
| 10.6.5                                  | LV6         | CM6 - The Contractor's office, leachate treatment plant and laboratory will be given an aesthetic treatment in earth tones to reduce their visual impact and albedo and blend them into the surrounding landscape.   | To minimise the landscape and visual impacts | Infrastructure<br>area               | SENTX<br>Contractor | <b>✓</b> | <b>√</b> |                        | EIAO-TM Annex 18                       | Implemented                          |
| 10.6.5                                  | LV7         | CM7 - The Contractor's office, leachate treatment plant and laboratory will be surrounded by a minimum of 5m wide and 0.75m high earth bund on the west and south sides planted with a dense screen of tree and shrub vegetation. Additional tree planting will be provided in unused spaces with thin infrastructure  | To minimise the landscape and visual impacts | Infrastructure<br>area               | SENTX<br>Contractor | <b>√</b> | <b>√</b> |                        | EIAO-TM Annex 18<br>and ETWBC 7/2002   | Not applicable                       |

| EIA Ref.                                | EM&A<br>Ref | Environmental Protection Measures/<br>Mitigation Measures  | Objectives of the<br>Recommended  | Location of the Measures | Who to implement           |   |   | implement<br>ure? <sup>(1)</sup> | What requirements or standards for the | Implementation<br>Status and Remarks |
|---|-------------|--|---|--------------------------|----------------------------|---|---|----------------------------------|--|--------------------------------------|
|   |             |  | Measure & Main<br>Concerns to address   |                          | the measure?               | D | С | O/R A                            | measure to achieve?                    |                                      |
|   |             | site, along access roads and in and around car parks. This will be supplemented with shrub planting, where appropriate.  |   |                          |                            |   |   |                                  |  |                                      |
| 10.6.5                                  | LV8         | CM8 - Planting trials will be carried out in an on-site nursery prior to implementation of the first phase of restoration to establish the best planting matrix and management intensity of the recommended plant materials for the restoration. | To minimise the landscape and visual impacts                                    | SENTX Site               | SENTX<br>Contractor        |   | ✓ |                                  | EIAO-TM Annex 18                       | Implemented                          |
| 11.4.1 and<br>SENTX<br>latest<br>design | LV9         | During the preparation of the detailed landscape design plan, the design submission will be audited against the recommendation proposed in the <i>ER Report</i> by the Registered Landscape Architect from the ET.                               | To ensure the implementation of mitigation measures proposed in this EIA Report | SENTX Site               | SENTX<br>Contractor/E<br>T | ✓ | ✓ |                                  | EIAO-TM Annex 18                       | Implemented                          |