

# Appendix D. Event and Action Plan for Air Quality, Noise, Water Quality, Ecology and Landscape & Visual

## Air Quality

| Event   | Action<br>ET Leader  | IEC  | ER   | Contractor   |
|---|--|--|--|--|
| <b>Action Level</b>                               |  |  |  |  |
| 1. Exceedance for one sample                      | <ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures.</li> <li>2. Inform IEC and ER.</li> <li>3. Repeat measurement to confirm finding.</li> <li>4. Increase monitoring frequency to daily.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET.</li> <li>2. Check Contractor's working method.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Notify Contractor.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Rectify any unacceptable practice.</li> <li>2. Amend working methods if appropriate.</li> </ol>  |
| 2. Exceedance for two or more consecutive samples | <ol style="list-style-type: none"> <li>1. Identify the source.</li> <li>2. Inform IEC and ER.</li> <li>3. Advise ER on the effectiveness of the proposed remedial measures</li> <li>4. Repeat measurements to confirm findings.</li> <li>5. Increase monitoring frequency to daily.</li> <li>6. Discuss with IEC and the Contractor on remedial actions required.</li> <li>7. If exceedance continues, arrange meeting with IEC and ER.</li> <li>8. If exceedance stops, cease additional monitoring.</li> </ol> | <ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET.</li> <li>2. Check the Contractor's working method.</li> <li>3. Discuss with ET Leader and the Contractor on possible remedial measures.</li> <li>4. Advise ER on the effectiveness of the proposed remedial measures.</li> <li>5. Supervise implementation of remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing.</li> <li>2. Notify the Contractor.</li> <li>3. Ensure remedial measures properly implemented.</li> </ol> | <ol style="list-style-type: none"> <li>1. Submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>2. Implement the agreed proposals.</li> <li>3. Amend proposal if appropriate.</li> </ol>  |
| <b>Limit Level</b>                                |  |  |  |  |
| 1. Exceedance for one sample                      | <ol style="list-style-type: none"> <li>1. Identify source, investigate the causes of exceedance and propose remedial measures.</li> <li>2. Inform ER and EPD.</li> <li>3. Repeat measurement to confirm finding.</li> <li>4. Increase monitoring frequency to daily.</li> <li>5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET.</li> <li>2. Check the Contractor's working method.</li> <li>3. Discuss with ET Leader and the Contractor on possible remedial measures.</li> <li>4. Advise ER on the effectiveness of the proposed remedial measures.</li> <li>5. Supervise implementation of remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing.</li> <li>2. Notify the Contractor.</li> <li>3. Ensure remedial measures properly implemented.</li> </ol> | <ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance.</li> <li>2. Submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>3. Implement the agreed proposals.</li> <li>4. Amend proposal if appropriate.</li> </ol> |
| 2. Exceedance for two or                          | <ol style="list-style-type: none"> <li>1. Notify IEC, ER, EPD and the Contractor.</li> </ol>   | <ol style="list-style-type: none"> <li>1. Discuss amongst ER, ET Leader and the</li> </ol>   | <ol style="list-style-type: none"> <li>1. Confirm receipt of notification of</li> </ol>  | <ol style="list-style-type: none"> <li>1. Take immediate action to avoid</li> </ol>  |

| Event                    | Action  |   |   |  |
|--------------------------|---|---|---|--|
|                          | ET Leader   | IEC   | ER  | Contractor   |
| more consecutive samples | <ol style="list-style-type: none"> <li>Identify the source.</li> <li>Repeat measurements to confirm findings.</li> <li>Increase monitoring frequency to daily.</li> <li>Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>Arrange meeting IEC and ER to discuss the remedial actions to be taken.</li> <li>Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> <li>If exceedance stops, cease additional monitoring.</li> </ol> | <ol style="list-style-type: none"> <li>Contractor on the potential remedial actions.</li> <li>Review the Contractor's remedial actions whenever necessary and advise ER accordingly.</li> <li>Supervise the implementation of remedial measures.</li> </ol> | <ol style="list-style-type: none"> <li>exceedance in writing.</li> <li>Notify the Contractor.</li> <li>In consultation with IEC, agree with the remedial measures to be implemented.</li> <li>Ensure remedial measures are properly implemented.</li> <li>If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.</li> </ol> | <ol style="list-style-type: none"> <li>further exceedance.</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>Implement the agreed proposals.</li> <li>Resubmit proposals if problem still not under control.</li> <li>Stop the relevant activity of works as determined by ER until the exceedance is abated.</li> </ol> |

### Construction Noise

| Event               | Action  |  |  |  |
|---------------------|---|--|--|--|
|                     | ET Leader   | IEC  | ER   | Contractor   |
| <b>Action Level</b> | <ol style="list-style-type: none"> <li>Notify IEC and the Contractor.</li> <li>Carry out investigation.</li> <li>Report the results of investigation to IEC and the Contractor.</li> <li>Discuss with the Contractor and formulate remedial measures.</li> <li>Increase monitoring frequency to check mitigation measures.</li> </ol> | <ol style="list-style-type: none"> <li>Review with analysed results submitted by ET.</li> <li>Review the proposed remedial measures by the Contractor and advise ER accordingly.</li> <li>Supervise the implement of remedial measures.</li> </ol>     | <ol style="list-style-type: none"> <li>Confirm receipt of notification of exceedance in writing.</li> <li>Notify the Contractor.</li> <li>Require the Contractor to propose remedial measures for the analysed noise problem.</li> <li>Ensure remedial measures are properly implemented.</li> </ol> | <ol style="list-style-type: none"> <li>Submit noise mitigation proposals to IEC.</li> <li>Implement noise mitigation proposals.</li> </ol>   |
| <b>Limit Level</b>  | <ol style="list-style-type: none"> <li>Identify the source.</li> <li>Notify IEC, ER, EPD and the Contractor.</li> <li>Repeat measurement to confirm findings.</li> <li>Increase monitoring frequency.</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be</li> </ol>                | <ol style="list-style-type: none"> <li>Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions.</li> <li>Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER</li> </ol> | <ol style="list-style-type: none"> <li>Confirm receipt of notification of exceedance in writing.</li> <li>Notify the Contractor.</li> <li>Require the Contractor to propose remedial measures for the analysed noise problem.</li> </ol>   | <ol style="list-style-type: none"> <li>Take immediate action to avoid further exceedance.</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>Implement the</li> </ol> |

| Event | Action   |   |  |  |
|-------|--|---|--|--|
|       | ET Leader  | IEC   | ER   | Contractor   |
|       | implemented.<br>6. Inform IEC, ER, and EPD the causes & actions taken for the exceedances.<br>7. Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results.<br>8. If exceedance stops, cease additional monitoring. | accordingly.<br>3. Supervise the implementation of remedial measures. | 4. Ensure remedial measures are properly implemented.<br>5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated. | agreed proposals.<br>4. Resubmit proposals if problem still not under control.<br>5. Stop the relevant activity of works as determined by the ER until the exceedance is abated. |

### Water Quality

| Event   | Action  |   |  |   |
|---|---|---|--|---|
|   | ET Leader   | IEC   | ER   | Contractor  |
| <b>Action Level</b>                               |   |   |  |   |
| 1. Exceedance for one sample                      | 1. Repeat in-situ measurement to confirm finding;<br>2. Identify source(s) of impact;<br>3. Inform IEC and Contractor;<br>4. Check monitoring data, all plant, equipment and Contractor's working methods;<br>5. Discuss mitigation measures with IEC and Contractor; and<br>6. Repeat measurement on next day of exceedance.                     | 1. Discuss with ET and Contractor on the mitigation measures;<br>2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and<br>3. Assess the effectiveness of the implemented mitigation measures. | 1. Discuss with IEC on the proposed mitigation measures; and<br>2. Make agreement on the mitigation measures to be implemented.  | 1. Inform the ER and confirm notification of the non-compliance in writing;<br>2. Rectify unacceptable practice;<br>3. Check all plant and equipment;<br>4. Consider changes of working methods;<br>5. Discuss with ET and IEC and propose mitigation measures to IEC and ER; and<br>6. Implement the agreed mitigation measures.                             |
| 2. Exceedance for two or more consecutive samples | 1. Repeat in-situ measurement to confirm finding;<br>2. Identify source(s) of impact;<br>3. Inform IEC and Contractor;<br>4. Check monitoring data, all plant, equipment and Contractor's working methods;<br>5. Discuss mitigation measures with IEC and Contractor;<br>6. Ensure mitigation measures are implemented;<br>7. Prepare to increase | 1. Discuss with ET and Contractor on the mitigation measures;<br>2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and<br>3. Assess the effectiveness of the implemented mitigation           | 1. Discuss with IEC on the proposed mitigation measures;<br>2. Make agreement on the mitigation measures to be implemented; and<br>3. Assess the effectiveness of the implemented mitigation measures. | 1. Inform the Engineer and confirm notification of the non-compliance in writing;<br>2. Rectify unacceptable practice;<br>3. Check all plant and equipment;<br>4. Consider changes of working methods;<br>5. Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days; and<br>6. Implement the agreed mitigation measures. |

| Event   | Action  |  |  |   |
|---|---|--|--|---|
|   | ET Leader   | IEC  | ER   | Contractor  |
|   | the monitoring frequency to daily; and<br>8. Repeat measurement on next day of exceedance.  | measures.  |  |   |
| <b>Limit Level</b>                                |   |  |  |   |
| 1. Exceedance for one sample                      | <ol style="list-style-type: none"> <li>Repeat in-situ measurement to confirm finding;</li> <li>Identify source(s) of impact;</li> <li>Inform IEC, Contractor and EPD;</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>Discuss mitigation measures with IEC, ER and Contractor;</li> <li>Ensure mitigation measures are implemented; and</li> <li>Increase the monitoring frequency to daily until no exceedance of Limit level.</li> </ol>                          | <ol style="list-style-type: none"> <li>Discuss with ET and Contractor on the mitigation measures;</li> <li>Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol> | <ol style="list-style-type: none"> <li>Discuss with IEC, ET and Contractor on the proposed mitigation measures; and</li> <li>Request Contractor to critically review the working methods;</li> <li>Make agreement on the mitigation measures to be implemented; and</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol>   | <ol style="list-style-type: none"> <li>Inform the Engineer and confirm notification of the non-compliance in writing;</li> <li>Rectify unacceptable practice;</li> <li>Check all plant and equipment;</li> <li>Consider changes of working methods;</li> <li>Discuss with ET and IEC and ER and propose mitigation measures to IEC and ER within 3 working days; and</li> <li>Implement the agreed mitigation measures.</li> </ol>  |
| 2. Exceedance for two or more consecutive samples | <ol style="list-style-type: none"> <li>Repeat in-situ measurement to confirm finding;</li> <li>Identify source(s) of impact;</li> <li>Inform IEC, Contractor and EPD;</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>Discuss mitigation measures with IEC, ER and Contractor;</li> <li>Ensure mitigation measures are implemented; and</li> <li>Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.</li> </ol> | <ol style="list-style-type: none"> <li>Discuss with ET and Contractor on the mitigation measures;</li> <li>Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol> | <ol style="list-style-type: none"> <li>Discuss with IEC, ET and Contractor on the proposed mitigation measures; and</li> <li>Request Contractor to critically review the working methods;</li> <li>Make agreement on the mitigation measures to be implemented;</li> <li>Assess the effectiveness of the implemented mitigation measures; and</li> <li>Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit Level.</li> </ol> | <ol style="list-style-type: none"> <li>Inform the ER and confirm notification of the non-compliance in writing;</li> <li>Rectify unacceptable practice;</li> <li>Check all plant and equipment;</li> <li>Consider changes of working methods;</li> <li>Discuss with ET and IEC and ER and propose mitigation measures to IEC and ER within 3 working days;</li> <li>Implement the agreed mitigation measures; and</li> <li>As directed by the Engineer, to slow down or to stop all or part of the marine work or construction activities.</li> </ol> |