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

## **Air Quality**

| Event   | Action   |   |   |  |  |
|---|--|---|---|--|--|
|   | ET Leader  | IEC   | ER  | Contractor   |  |
| Action Level  |  |   |   |  |  |
| Exceedance for<br>one sample                            | <ol> <li>Identify source, investigate<br/>the causes of exceedance<br/>and propose remedial<br/>measures.</li> <li>Inform IEC and ER.</li> <li>Repeat measurement to<br/>confirm finding.</li> <li>Increase monitoring<br/>frequency to daily.</li> </ol>  | <ol> <li>Check monitoring data<br/>submitted by ET.</li> <li>Check Contractor's<br/>working method.</li> </ol>  | 1. Notify Contractor.   | Rectify any unacceptable practice.     Amend working methods if appropriate.   |  |
| Exceedance for<br>two or more<br>consecutive<br>samples | <ol> <li>Identify the source.</li> <li>Inform IEC and ER.</li> <li>Advise ER on the effectiveness of the proposed remedial measures</li> <li>Repeat measurements to confirm findings.</li> <li>Increase monitoring frequency to daily.</li> <li>Discuss with IEC and the Contractor on remedial actions required.</li> <li>If exceedance continues, arrange meeting with IEC and ER.</li> <li>If exceedance stops, cease additional monitoring.</li> </ol> | <ol> <li>Check monitoring data submitted by ET.</li> <li>Check the Contractor's working method.</li> <li>Discuss with ET Leader and the Contractor on possible remedial measures.</li> <li>Advise ER on the effectiveness of the proposed remedial measures.</li> <li>Supervise implementation of remedial measures.</li> </ol>   | 1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented.  | <ol> <li>Submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>Implement the agreed proposals.</li> <li>Amend proposal if appropriate.</li> </ol>   |  |
| Limit Level   |  |   |   |  |  |
| Exceedance for<br>one sample                            | <ol> <li>Identify source, investigate the causes of exceedance and propose remedial measures.</li> <li>Inform ER and EPD.</li> <li>Repeat measurement to confirm finding.</li> <li>Increase monitoring frequency to daily.</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol>   | <ol> <li>Check monitoring data<br/>submitted by ET.</li> <li>Check the Contractor's<br/>working method.</li> <li>Discuss with ET Leader<br/>and the Contractor on<br/>possible remedial<br/>measures.</li> <li>Advise ER on the<br/>effectiveness of the<br/>proposed remedial<br/>measures.</li> <li>Supervise<br/>implementation of<br/>remedial measures.</li> </ol> | <ol> <li>Confirm receipt of<br/>notification of<br/>exceedance in writing.</li> <li>Notify the Contractor.</li> <li>Ensure remedial<br/>measures properly<br/>implemented.</li> </ol> | <ol> <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 agreed proposals.</li> <li>Amend proposal if appropriate.</li> </ol> |  |

monitoring.

#### **Event Action ET Leader IEC ER** Contractor 2. Exceedance for 1. Notify IEC, ER, EPD and 1. Discuss amongst ER, 1. Confirm receipt of 1. Take immediate action two or more the Contractor. ET Leader and the notification of to avoid further consecutive Contractor on the exceedance in writing. exceedance. 2. Identify the source. samples potential remedial 2. Notify the Contractor. 2. Submit proposals for 3. Repeat measurements to actions. remedial actions to IEC confirm findings. 3. In consultation with IEC, 2. Review the Contractor's within 3 working days of agree with the remedial 4. Increase monitoring remedial actions notification. measures to be frequency to daily. whenever necessary implemented. 3. Implement the agreed 5. Carry out analysis of the and advise ER proposals. 4. Ensure remedial Contractor's working accordingly. measures are properly 4. Resubmit proposals if procedures to determine 3. Supervise the implemented. problem still not under possible mitigation to be implementation of control. 5. If exceedance implemented. remedial measures. 6. Arrange meeting IEC and continues, consider 5. Stop the relevant what activity of the work activity of works as ER to discuss the remedial is responsible and determined by ER until actions to be taken. instruct the Contractor the exceedance is 7. Assess effectiveness of to stop that activity of abated. the Contractor's remedial work until the actions and keep IEC, exceedance is abated. EPD and ER informed of the results. 8. If exceedance stops, cease additional

## **Construction Noise**

| Event        | Action  |  |   |   |
|--------------|---|--|---|---|
|              | ET Leader   | IEC  | ER  | Contractor  |
| Action Level | <ol> <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>   | Review with analysed results submitted by ET.     Review the proposed remedial measures by the Contractor and advise ER accordingly.     Supervise the implement of remedial measures.   | Confirm receipt of notification of exceedance in writing.     Notify the Contractor.     Require the Contractor to propose remedial measures for the analysed noise problem.     Ensure remedial measures are properly implemented.   | Submit noise mitigation proposals to IEC.     Implement noise mitigation proposals.   |
| Limit Level  | 1. Identify the source. 2. Notify IEC, ER, EPD and the Contractor. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Inform IEC, ER, and EPD the causes & actions taken for the exceedances. 7. Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 8. If exceedance stops, cease additional monitoring. | 1. Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions.  2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly.  3. Supervise the implementation of remedial measures. | 1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 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. | working days of notification.  3. Implement the agreed proposals.  4. Resubmit proposals if problem still not under control.  5. Stop the relevant activity of works as |

## Water Quality

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

exceedance of Limit level.

#### **Event Action ET Leader IEC** FR Contractor 2. Exceedance for 1. Discuss with IEC on the 1. Repeat in-situ 1. Discuss with ET and 1. Inform the Engineer and two or more measurement to confirm Contractor on the proposed mitigation confirm notification of the consecutive finding; mitigation measures; non-compliance in samples measures: writing: 2. Identify source(s) of 2. Make agreement on the impact: 2. Review proposals mitigation measures to 2. Rectify unacceptable on mitigation be implemented; and practice; 3. Inform IEC and measures submitted 3. Check all plant and Assess the Contractor: by Contractor and effectiveness of the equipment; 4. Check monitoring data, all advise the ER implemented mitigation plant, equipment and 4. Consider changes of accordingly; and measures. Contractor's working working methods; 3. Assess the methods: 5. Discuss with ET and IEC effectiveness of the 5. Discuss mitigation and propose mitigation implemented measures to IEC and ER measures with IEC and mitigation within 3 working days; Contractor: measures. and 6. Ensure mitigation measures are 6. Implement the agreed implemented; mitigation measures. 7. Prepare to increase the monitoring frequency to daily; and 8. Repeat measurement on next day of exceedance. **Limit Level** 1. Exceedance for 1. Repeat in-situ 1. Discuss with ET and 1. Discuss with IEC, ET 1. Inform the Engineer and one sample measurement to confirm Contractor on the and Contractor on the confirm notification of the non-compliance in finding: mitigation proposed mitigation measures; measures; and writing; 2. Identify source(s) of impact; 2. Review proposals 2. Request Contractor to 2. Rectify unacceptable on mitigation critically review the practice; 3. Inform IEC, Contractor measures submitted working methods: and EPD; 3. Check all plant and by Contractor and 3. Make agreement on the equipment: 4. Check monitoring data, all advise the ER mitigation measures to 4. Consider changes of plant, equipment and accordingly; and be implemented; and Contractor's working working methods; 3. Assess the 4. Assess the 5. Discuss with ET and IEC effectiveness of the effectiveness of the 5. Discuss mitigation and ER and propose implemented implemented mitigation measures with IEC, ER mitigation measures to mitigation measures. and Contractor: IEC and ER within 3 measures 6. Ensure mitigation working days; and 6. Implement the agreed measures are mitigation measures. implemented; and 7. Increase the monitoring frequency to daily until no

| Event   | Action  |  |  |   |  |
|---|---|--|--|---|--|
|   | ET Leader   | IEC  | ER   | Contractor  |  |
| Exceedance for<br>two or more<br>consecutive<br>samples | <ol> <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> | Discuss with ET and Contractor on the mitigation measures;     Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; and     Assess the effectiveness of the implemented mitigation measures. | <ol> <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> <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> |  |

# **Landscape and Visual**

| Event                          | Action  |  |  |   |  |
|--------------------------------|---|--|--|---|--|
|                                | ET Leader   | IEC  | ER   | Contractor  |  |
| Action Level                   |   |  |  |   |  |
| Non-conformity on one occasion | <ol> <li>Identify Source;</li> <li>Inform the IEC and the ER;</li> <li>Discuss remedial actions with the IEC, the ER and the Contractor; and</li> <li>Monitor remedial actions until rectification has been completed.</li> </ol> | 1. Check report; 2. Check the     Contractor's     working method; 3. Discuss with the ES     and the contractor     on possible     remedial measures; 4. Advise the ER on     effectiveness of     proposed remedial     measures; and 5. Check     implementation of     remedial measures. | Notify Contractor; and     Ensure remedial     measures are properly     implemented | Amend working methods; and     Rectify damage and undertake any necessary replacement |  |

cease additional

monitoring.

### **Event Action** Repeated Non-1. Identify Source; 1. Amend working methods; 1. Check monitoring 1. Notify the Contractor; conformity and and report: 2. Inform the Project Proponent, IEC and the 2. Check the 2. Ensure remedial 2. Rectify damage and ER. If serious non-Contractor's undertake any necessary measures are properly compliance inform EPD; working method; implemented. replacement. 3. Increase monitoring 3. Discuss with the ES and the Contractor frequency; on possible 4. Discuss remedial actions with the IEC, the ER and remedial measures; 4. Advise the ER on the Contractor; 5. Monitor remedial actions effectiveness of proposed remedial until rectification has been measures; and completed; and 5. Supervise 6. If exceedance stops,

implementation of

remedial measures.