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

## Air Quality

**Event** Action **IEC ET Leader ER** Contractor **Action Level** 1. Rectify any Exceedance for 1. Identify source, investigate Check monitoring data 1. Notify Contractor. one sample the causes of exceedance submitted by ET. unacceptable practice. and propose remedial 2. Check Contractor's 2. Amend working measures. working method. methods if appropriate. 2. Inform IEC and ER. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. 2. Exceedance for 1. Identify the source. 1. Check monitoring data 1. Confirm receipt of 1. Submit proposals for two or more submitted by ET. notification of remedial actions to IEC 2. Inform IEC and ER. consecutive exceedance in writing. within 3 working days of 2. Check the Contractor's 3. Advise ER on the notification. samples working method. 2. Notify the Contractor. effectiveness of the 2. Implement the agreed proposed remedial 3. Discuss with ET Leader 3. Ensure remedial proposals. and the Contractor on measures measures properly possible remedial implemented. Amend proposal if 4. Repeat measurements to measures. appropriate. confirm findings. 4. Advise ER on the 5. Increase monitoring effectiveness of the frequency to daily. proposed remedial 6. Discuss with IEC and the measures. Contractor on remedial 5. Supervise actions required. implementation of 7. If exceedance continues, remedial measures. arrange meeting with IEC and ER. 8. If exceedance stops, cease additional monitorina. **Limit Level** 1. Exceedance for 1. Identify source, investigate Check monitoring data 1. Confirm receipt of 1. Take immediate action one sample the causes of exceedance submitted by ET. notification of to avoid further exceedance in writing. exceedance. and propose remedial 2. Check the Contractor's measures working method. 2. Notify the Contractor. 2. Submit proposals for 2. Inform ER and EPD. remedial actions to IEC 3. Discuss with ET Leader 3. Ensure remedial within 3 working days of 3. Repeat measurement to and the Contractor on measures properly notification. confirm finding. possible remedial implemented. 3. Implement the agreed measures. 4. Increase monitoring proposals. 4. Advise ER on the frequency to daily. 4. Amend proposal if effectiveness of the 5. Assess effectiveness of proposed remedial appropriate. Contractor's remedial measures. actions and keep IEC. EPD and ER informed of 5. Supervise implementation of the results. remedial measures.

## **Event** Action

- 2. Exceedance for two or more consecutive samples
- 1. Notify IEC, ER, EPD and
- the Contractor.

  2. Identify the source.
- 3. Repeat measurements to confirm findings.
- Increase monitoring frequency to daily.
- Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented.
- 6. Arrange meeting IEC and ER to discuss the remedial actions to be taken.
- 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.

- Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions.
- Review the Contractor's remedial actions whenever necessary and advise ER accordingly.
- 3. Supervise the implementation of remedial measures.
- Confirm receipt of notification of exceedance in writing.
- 2. Notify the Contractor.
- In consultation with IEC, agree with the remedial measures to be implemented.
- 4. Ensure remedial measures are properly implemented.
- 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.
- Take immediate action to avoid further exceedance.
- Submit proposals for remedial actions to IEC within 3 working days of notification.
- 3. Implement the agreed proposals.
- Resubmit proposals if problem still not under control.
- Stop the relevant activity of works as determined by ER until the exceedance is abated.

## Construction Noise

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>	<ol> <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>	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	<ol> <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 implemented.</li> <li>Inform IEC, ER, and EPD the causes &amp; actions taken for the exceedances.</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>	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	<ol> <li>Repeat in-situ measurement to confirm finding;</li> <li>Identify source(s) of impact;</li> <li>Inform IEC and Contractor;</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>Discuss mitigation measures with IEC and Contractor; and</li> <li>Repeat measurement on next day of exceedance.</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.	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.		

#### **Event**

#### **Action**

Exceedance for two or more consecutive samples

- Repeat in-situ
   measurement to confirm
   finding;
- Identify source(s) of impact;
- Inform IEC and Contractor;
- Check monitoring data, all plant, equipment and Contractor's working methods;
- Discuss mitigation measures with IEC and Contractor;
- Ensure mitigation measures are implemented;
- Prepare to increase the monitoring frequency to daily; and
- 8. Repeat measurement on next day of exceedance.

- Discuss with ET and 1
   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;
- 2. Make agreement on the mitigation measures to be implemented; and
- 3. Assess the effectiveness of the implemented mitigation measures.
- Inform the Engineer and confirm notification of the non-compliance in writing;
- Rectify unacceptable practice;
- Check all plant and equipment;
- Consider changes of working methods;
- Discuss with ET and IEC and propose mitigation measures to IEC and ER within 3 working days;
- 6. Implement the agreed mitigation measures.

#### **Limit Level**

- Exceedance for one sample
- Repeat in-situ measurement to confirm finding;
- Identify source(s) of impact;
- Inform IEC, Contractor and EPD;
- Check monitoring data, all plant, equipment and Contractor's working methods;
- 5. Discuss mitigation measures with IEC, ER and Contractor;
- 6. Ensure mitigation measures are implemented; and
- Increase the monitoring frequency to daily until no exceedance of Limit level.

- Discuss with ET and 1. Contractor on the mitigation measures;
- 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, ET and Contractor on the proposed mitigation measures; and
- Request Contractor to critically review the working methods;
- Make agreement on the mitigation measures to be implemented; and
- Assess the
   effectiveness of the
   implemented mitigation
   measures.
- Inform the Engineer and confirm notification of the non-compliance in writing;
- Rectify unacceptable practice;
- Check all plant and equipment;
- Consider changes of working methods;
- 5. Discuss with ET and IEC and ER and propose mitigation measures to IEC and ER within 3 working days; and
- Implement the agreed mitigation measures.

#### **Event**

#### 2. Exceedance for two or more consecutive samples

#### **Action**

- 1. Repeat in-situ measurement to confirm finding;
- 2. Identify source(s) of impact;
- 3. Inform IEC, Contractor and EPD;
- 4. Check monitoring data, all plant, equipment and Contractor's working methods;
- 5. Discuss mitigation measures with IEC, ER and Contractor;
- 6. Ensure mitigation measures are implemented; and
- 7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.

- 1. Discuss with ET and 1 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, ET and Contractor on the proposed mitigation measures; and
- Request Contractor to critically review the working methods;
- Make agreement on the mitigation measures to be implemented;
- 4. Assess the effectiveness of the implemented mitigation measures; and
- 5. 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.

- 1. Inform the ER and confirm notification of the non-compliance in writing;
- 2. Rectify unacceptable practice:
- 3. Check all plant and equipment;
- Consider changes of working methods;
- 5. Discuss with ET and IEC and ER and propose mitigation measures to IEC and ER within 3 working days;
- 6. Implement the agreed mitigation measures; and
- As directed by the Engineer, to slow down or to stop all or part of the marine work or construction activities.

# Landscape and Visual

#### **Event**

**Action Level** 

one occasion

Non-conformity on

**Action** 

**ET Leader** 

1. Identify Source;

#### **IEC**

- 2. Inform the IEC and the
- 3. Discuss remedial actions with the IEC, the ER and the Contractor: and
- 4. Monitor remedial actions until rectification has been completed.

- 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.

## Contractor

 Notify Contractor; and Ensure remedial measures are properly implemented

**ER** 

# Amend working methods;

Rectify damage and undertake any necessary replacement

### Repeated Nonconformity

- 1. Identify Source:
- 2. Inform the Project Proponent. IEC and the ER. If serious noncompliance inform EPD;
- 3. Increase monitoring frequency:
- 4. Discuss remedial actions with the IEC, the ER and the Contractor;
- 5. Monitor remedial actions until rectification has been completed; and
- 6. If exceedance stops, cease additional monitoring.

- 1. Check monitoring 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
- Supervise implementation of remedial measures.

- 1. Notify the Contractor; and
- Ensure remedial measures are properly implemented.
- 1. Amend working methods:
- 2. Rectify damage and undertake any necessary replacement.