Appendix F

Event and Action Plan

Event and Action Plan for Impact Air Monitoring

			Action				
	ET (a)		IEC (a)		SOR (a)		Contractor(s)
Action Level Exceedance							
1. 2.	Identify the source. Repeat measurement to confirm finding. If two	1.	Check monitoring data submitted by the ET.	1.	Confirm receipt of notification of failure in	1.	Rectify any unacceptable practice
	consecutive measurements exceed Action Level, the exceedance is then confirmed.	2.	Check the Contractor's working method.	2.	writing. Notify the Contractor.	2.	Amend working methods if appropriate
3.	Inform the IEC and the SOR.	3.	If the exceedance is	3.	Ensure remedial measures	3.	If the exceedance is
4.	Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented.		confirmed to be Project related after investigation, discuss with the ET and the		properly implemented.		confirmed to be Project related, submit proposals for remedial
5.	If the exceedance is confirmed to be Project related after investigation, increase monitoring frequency to daily. Discuss with the IEC and the Contractor on remedial	4	Contractor on possible remedial measures. Advise the SOR on the				actions to IEC within 3 working days of
6.	actions required.	4.	effectiveness of the proposed			4.	notification Implement the agreed
7. 8.	If exceedance continues, arrange meeting with the IEC and the SOR. If exceedance stops, cease additional monitoring.	5.	remedial measures. Supervise implementation of remedial measures.			5.	proposals Amend proposal if appropriate

			Action				
	ET (a)		IEC (a)		SOR (a)		Contractor(s)
mit Level Exceedance							
1.		1.	Check monitoring data	1.	Confirm receipt of	1.	Take immediate action
2.	1		submitted by the ET.		notification of failure in		to avoid further
	two consecutive measurements exceed Limit	2.	Check Contractor's working		writing.		exceedance.
	Level, the exceedance is then confirmed.		method.	2.	Notify the Contractor.	2.	If the exceedance is
3.	, ,	3.	If the exceedance is	3.	If the exceedance is		confirmed to be Proje
	Contractor.		confirmed to be Project		confirmed to be Project		related after
4.	O		related after investigation,		related after investigation, in		investigation, submi
	check Contractor's working procedures to		discuss with the ET and the		consultation with the IEC,		proposals for remed
	determine possible mitigation to be		Contractor on possible		agree with the Contractor on		actions to IEC within
_	implemented.		remedial measures.		the remedial measures to be		working days of
5.	· · · · · · · · · · · · · · · · · · ·	4.	Advise the SOR on the		implemented.	_	notification.
	related after investigation, increase		effectiveness of the proposed	4.	Ensure remedial measures	3.	Implement the agree
	monitoring frequency to daily.	_	remedial measures.	_	are properly implemented.		proposals.
6.		5.	Supervise implementation of	5.	If exceedance continues,	4.	Amend proposal if
	working procedures to determine possible		remedial measures.		consider what activity of the	_	appropriate.
7	mitigation to be implemented.				work is responsible and	5.	Stop the relevant
7.	0 0				instruct the Contractor to		activity of works as
8.	to discuss the remedial actions to be taken. Assess effectiveness of the Contractor's				stop that activity of work until the exceedance is		determined by the Suntil the exceedance
0.							
	remedial actions and keep the IEC, the DEP and the SOR informed of the results.				abated.		abated.
0							
9.	1 ,						
	monitoring.						

Note: (a) ET - Environmental Team; IEC - Independent Environmental Checker; SOR - Supervising Officer's Representative

$Event \ \& \ Action \ Plan \ for \ Impact \ Water \ Quality \ Monitoring$

Event		Leader	IEC		SO	R	Contractor	
Action level being exceeded by one sampling day	1. 2. 3. 4.	Repeat <i>in situ</i> measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor and SOR; Check monitoring data, all plant, equipment and Contractor's working methods.	1.	Check monitoring data submitted by ET and Contractor's working methods.	2.	Confirm receipt of notification of non-compliance in writing; Notify Contractor.	 2. 3. 	Inform the SOR and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling days	 2. 3. 4. 	Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, Contractor, SOR and EPD; Check monitoring data, all plant,	 2. 	Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions;	 2. 3. 	Discuss with IEC on the proposed mitigation measures; Ensure mitigation measures are properly implemented; Assess the effectiveness of the implemented mitigation	 2. 3. 	Inform the Supervising Officer and confirm notification of the non- compliance in writing; Rectify unacceptable practice; Check all plant and
	5.6.7.	equipment and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Action level;	 4. 	Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly; Supervise the implementation of mitigation measures.		measures.	4.	equipment and consider changes of working methods; Submit proposal of additional mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	1.	Repeat measurement on next day of exceedance to confirm findings;	1.	Check monitoring data submitted by ET and	1.	Confirm receipt of notification of failure in	1.	Inform the SOR and confirm notification of the

Event	ET Leader	IEC	SOR	Contractor
	 Identify source(s) of impact; Inform IEC, Contractor, SOR and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor; 	Contractor's working method; 2. Discuss with ET and Contractor on possible remedial actions; 3. Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly.	 writing; Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to review the working methods. 	non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment and consider changes of working methods; 4. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR.
Limit level being exceeded by two or more consecutive sampling days	 Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor, SOR and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days; 	 Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions; Review the Contractor's mitigation measures whenever necessary to assure their effectiveness and advise the SOR accordingly; Supervise the implementation of mitigation measures. 	 Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Ensure mitigation measures are properly implemented; Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until no exceedance of Limit level. 	 Take immediate action to avoid further exceedance; Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; Implement the agreed mitigation measures; Resubmit proposals of mitigation measures if problem still not under control; As directed by the Supervising Officer, to slow down or to stop all or part of the construction activities until no exceedance of Limit level.

Note: ET – Environmental Team, IEC – Independent Environmental Checker, SOR – Supervising Officer's Representative

Event/Action Plan for Impact Dolphin Monitoring

EVENT		ACTION		
	ET	IEC	SOR	Contractor
Action Level	 Repeat statistical data analysis to confirm findings; Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; Identify source(s) of impact; Inform the IEC, SOR and Contractor; Check monitoring data. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. 	 Check monitoring data submitted by ET and Contractor; Discuss monitoring results and finding with the ET and the Contractor. 	 Discuss monitoring with the IEC and any other measures proposed by the ET; If SOR is satisfied with the proposal of any other measures, SOR to signify the agreement in writing on the measures to be implemented. 	 Inform the SOR and confirm notification of the non-compliance in writing; Discuss with the ET and the IEC and propose measures to the IEC and the SOR; Implement the agreed measures.
Limit Level	 Repeat statistical data analysis to confirm findings; Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 	 Check monitoring data submitted by ET and Contractor; Discuss monitoring results and findings with the ET and the Contractor; Attend the meeting to discuss with ET, SOR and 	 Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures. If SOR is satisfied with the 	 Inform the SOR and confirm notification of the non-compliance in writing; Attend the meeting to discuss with ET, IEC and SOR the necessity of additional dolphin monitoring and any other

EVENT		ACTION		
	ET	IEC	SOR	Contractor
	 Identify source(s) of impact; Inform the IEC, SOR and Contractor of findings; Check monitoring data; Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. If ET proves that the source of impact is caused by any of the construction activity by the works contract, ET to arrange a meeting to discuss with IEC, SOR and Contractor the necessity of additional dolphin monitoring and/or any other potential mitigation measures (e.g., consider to modify the perimeter silt curtain or consider to control/temporarily stop relevant construction activity etc.) and submit to IEC a proposal of additional dolphin monitoring and/or mitigation measures where necessary. 	Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures. 4. Review proposals for additional monitoring and any other mitigation measures submitted by ET and Contractor and advise SOR of the results and findings accordingly. 5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise SOR the results and findings accordingly.	proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, SOR to signify the agreement in writing on such proposals and any other mitigation measures. 3. Supervise the implementation of additional monitoring and/or any other mitigation measures.	potential mitigation measures. 3. Jointly submit with ET to IEC a proposal of addition dolphin monitoring and/ any other mitigation measures when necessary 4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures

Note: ET – Environmental Team, IEC – Independent Environmental Checker, SOR – Supervising Officer's Representative

Appendix G

Cumulative Statistics on Exceedances, Complaints, Notifications of Summons and Successful Prosecutions

 Table G1
 Cumulative Statistics on Exceedances

Monitoring Parameters	Action/Limit Level	Total No. recorded in this reporting year (Nov 2019 to Oct 2020)	Total No. recorded since Contract commencement
1-Hr TSP	Action	20	116
	Limit	6	14
24-Hr TSP	Action	0	10
	Limit	0	4
Water Quality	Action	0	167
	Limit	0	19
Impact Dolphin	Action	0	11
Monitoring	Limit	3	19
Post Construction	Action	0	0
(Operational) Dolphin Monitoring	Limit	1	1

Table G2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Cumulative Statistics						
	Complaints	Notifications of	Successful				
		Summons	Prosecutions				
This Reporting Period	0	0	0				
(Nov 2019 to Oct 2020)							
Total No. received	17	1	0				
since Contract							
commencement							

Appendix H

Waste Flow Table



Monthly Summary Waste Flow Table

Name of Department: HyD Contract No. / Works Order No.: HY/2012/08

Monthly Summary Waste Flow Table for December 2019 [to be submitted not later than the 15th day of each month following reporting month] (All quantities shall be rounded off to 3 decimal places.)

	Monthly Break-down of <u>Inert</u> Construction & Demolition Materials (i.e. Public Fill Materials)							
Month	(a)=(b)+(c)+(d)+(e) Total Quantity Generated	(b) Hard Rock and Large Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill			
	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)			
Sub-total	2224.407	0.000	76.754	585.369	1562.284			
Jan-2019	299.831	0.000	53.419	215.427	30.985			
Feb-2019	133.335	0.000	46.021	67.707	19.607			
Mar-2019	120.224	0.000	50.455	20.964	48.805			
Apr-2019	130.329	0.000	58.956	0.000	71.373			
May-2019	67.355	0.000	51.297	0.000	16.058			
Jun-2019	4.134	0.000	0.000	0.000	4.134			
Half Year Sub-total	755.208	0.000	260.148	304.098	190.962			
Jul-2019	3.821	0.000	0.000	0.000	3.821			
Aug-2019	2.388	0.000	0.000	0.000	2.388			
Sep-2019	4.191	0.000	0.000	0.000	4.191			
Oct-2019	8.366	0.000	0.000	0.000	8.366			
Nov-2019	6.215	0.000	0.000	0.000	6.215			
Dec-2019	4.216	0.000	0.000	0.000	4.216			
Project Total Quantities	3008.822	0.000	336.902	889.467	1782.443			

		Actual Quantities of Non-inert Construction Waste Generated Monthly								
Month	Me	Metals Paper/ cardboard packaging Plastics (see Note 3)		Chemic	al Waste	Others, e.g. General Refuse disposed at Landfill				
	(in '0	00kg)	(in '(000kg)	(in '(000kg)	(in '0	00kg)	(in '000ton)	
	generated	recycled	generated	recycled	generated	recycled	generated	Disposed	generated	
Sub-total	6763.82	6763.82	7.74	7.74	8.70	8.70	60.35	60.35	13.989	
Jan-2019	394.55	394.55	0.00	0.00	0.00	0.00	0.00	0.00	0.538	
Feb-2019	103.72	103.72	0.62	0.62	0.00	0.00	1.672	1.672	0.578	
Mar-2019	88.20	88.20	0.46	0.46	0.00	0.00	0.00	0.00	0.692	
Apr-2019	260.89	260.89	0.00	0.00	3.90	3.90	1.045	1.045	0.707	
May-2019	0.66	0.66	1.46	1.46	0.00	0.00	0.00	0.00	0.798	
Jun-2019	136.75	136.75	0.66	0.66	0.00	0.00	4.14	4.14	0.751	
Half Year Sub-total	984.77	984.77	3.20	3.20	3.90	3.90	6.857	6.857	4.064	
Jul-2019	444.37	444.37	1.20	1.20	0.00	0.00	0.00	0.00	0.730	
Aug-2019	505.93	505.93	0.00	0.00	1.58	1.58	3.80	3.80	0.703	
Sep-2019	397.10	397.10	0.60	0.60	1.62	1.62	8.00	8.00	0.737	
Oct-2019	523.05	523.05	0.00	0.00	1.04	1.04	5.80	5.80	0.754	
Nov-2019	271.73	271.73	1.90	1.90	0.00	0.00	1.00	1.00	0.525	
Dec-2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.441	
Project Total Quantities	9890.77	9890.77	14.64	14.64	16.84	16.84	85.807	85.807	21.943	



	Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*									
Total Quantity Generated Hard Rock and Large Broken Concrete Reused in the Contract Reused in other Projects Disposed of as Public Fill										
(in '000 ton)	(in '000 ton) (in '000 ton) (in '000 ton) (in '000 ton)									
3200.000 0.000 350.000 1000.000 2000.000										

	Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*								
Metals Paper/ cardboard packaging Plastics (see Note 3) Chemical Waste General Refuse disposed of at Landfil									
(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 ton)					
10500.00	20.00	20.00	100.00	30.000					

Notes:

- (1) The performance targets are given in the **ER Appendix 8J Clause 14** and the EM & A Manual(s).
- (2) The waste flow table shall also include C&D materials to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m³. (ER Part 8 Clause 8.8.5 (d) (ii) refers).



Monthly Summary Waste Flow Table

Name of Department: HyD Contract No. / Works Order No.: HY/2012/08

Monthly Summary Waste Flow Table for October 2020 [to be submitted not later than the 15th day of each month following reporting month] (All quantities shall be rounded off to 3 decimal places.)

	Monthly Break-down of <u>Inert</u> Construction & Demolition Materials (i.e. Public Fill Materials)							
Month	(a)=(b)+(c)+(d)+(e) Total Quantity Generated	(b) Hard Rock and Large Broken Concrete	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill			
	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)			
Sub-total	3008.812	0.000	336.902	336.902 889.467				
Jan-2020	174.69	0.000	0.000	0.000	174.69			
Feb-2020	1.455	0.000	0.000	0.000	1.455			
Mar-2020	3.252	0.000	0.000	0.000	3.252			
Apr-2020	4.200	0.000	0.000	0.000	4.200			
May-2020	7.015	0.000	0.000	0.000	7.015			
Jun-2020	2.670	0.000	0.000	0.000	2.693			
Half Year Sub-total	193.282	0.000	0.000	0.000	193.305			
Jul-2020	1.440	0.000	0.000	0.000	1.440			
Aug-2020	1.159	0.000	0.000	0.000	1.159			
Sep-2020	0.074	0.000	0.000	0.000	0.074			
Oct-2020	0.253	0.000	0.000	0.000	0.253			
Nov-2020								
Dec-2020								
Project Total Quantities	3205.020	0.000	336.902	889.467	1978.674			

	Actual Quantities of Non-inert Construction Waste Generated Monthly								
Month	Metals (in '000kg)		Paper/ cardboard packaging (in '000kg)		Plastics (see Note 3) (in '000kg)		Chemical Waste (in '000kg)		Others, e.g. General Refuse disposed at Landfill (in '000ton)
	generated	recycled	generated	recycled	generated	recycled	generated	Disposed	generated
Sub-total	9890.77	9890.77	14.64	14.64	16.84	16.84	85.807	85.807	21.943
Jan-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.54
Feb-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.349
Mar-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.226
Apr-2020	22.14	22.14	1.30	1.30	0.00	0.00	6.40	6.40	0.521
May-2020	6.2	6.2	0.54	0.54	0.00	0.00	0.60	0.60	0.536
Jun-2020	0.00	0.00	0.74	0.74	0.00	0.00	1.00	1.00	0.303
Half Year Sub-total	28.34	28.34	2.58	2.58	0.00	0.00	8.00	8.00	5.475
Jul-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.140
Aug-2020	0.00	0.00	1.06	1.06	0.00	0.00	0.00	0.00	0.110
Sep-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.100
Oct-2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.145
Nov-2020									
Dec-2020									
Project Total Quantities	9919.11	9919.11	18.28	18.28	16.84	16.84	93.807	93.807	27.913



Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*						
Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed of as Public Fill		
(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)		
3200.000	0.000	350.000	1000.000	2000.000		

Forecast of Total Quantities of Construction and Demolition Materials to be Generated from the Contract*						
Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	General Refuse disposed of at Landfill		
(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000 ton)		
10000.00	20.00	18.00	120.00	30.000		

Notes:

- (1) The performance targets are given in the **ER Appendix 8J Clause 14** and the EM & A Manual(s).
- (2) The waste flow table shall also include C&D materials to be imported for use at the Site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where the amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m³. (**ER Part 8 Clause 8.8.5** (d) (ii) refers).