

Appendix B

Proforma for EM&A Programme

Data Sheet for TSP Monitoring

Monitoring Location		
Details of Location		
Sampler Identification		
Date & Time of Sampling		
Elapsed-time	Start (min.)	
Meter Reading	Stop (min.)	
Total Sampling Time (min.)		
Weather Conditions		
Site Conditions		
Initial Flow Rate, Qsi	Pi (mmHg)	
	Ti (°C)	
	Hi (in.)	
	Qsi (Std. m ³)	
Final Flow Rate, Qsf	Pf (mmHg)	
	Tf (°C)	
	Hf (in.)	
	Qsf (Std. m ³)	
Average Flow Rate (Std. m ³)		
Total Volume (Std. m ³)		
Filter Identification No.		
Initial Wt. of Filter (g)		
Final Wt. of Filter (g)		
Measured TSP Level (µg/m ³)		

Name & Designation

Signature

Date

Field Operator:

Laboratory Staff:

Checked by:

Noise Monitoring Field Record Sheet

Monitoring Location		
Description of Location		
Date of Monitoring		
Measurement Start Time	(hh:mm)	
Measurement Time Length	(min.)	
Noise Meter Model/Identification		
Calibrator Model/Identification		
Measurement Results	L ₉₀ (dB(A))	
	L ₁₀ (dB(A))	
	L _{eq} (dB(A))	
Major Construction Noise Source(s) During Monitoring		
Other Noise Source(s) During Monitoring		
Remarks		

Name & Designation

Signature

Date

Recorded by:

Checked by:

Data Format for Water Quality Monitoring

A. The data base structure for water quality monitoring is listed below. The ET shall select the related field names to create their own data recording sheet.

Field Name	Type	Width	Dec	Remark
Project/contract ID	C	3		Given by EPD
Works Area ID	C	2		Given by EPD
SamStn	C	3		Sampling Station
Latitude	C	10		Latitude of Sampling Station
Longitude	C	10		Longitude of Sampling Station
Easting	C	6		HK Grid (Easting) of Sampling Station
Northing	C	6		HK Grid (Northing) of Sampling Station
Date	D	8		Sampling Date
Time	C	5		Sampling Time
Replicate	C	1		1 = first sample; 2 = duplicated sample; etc
StnPurpose	C	1		Purpose of Sampling Station (C = control; I = Impact; S = Sensitive receiver; etc)
SamPurpose	C	1		Purpose of Sample (B = baseline; I = Impact)
Weather	C	20		(sunshine, precipitation, humidity, air temperature)
TideStatus	C	10		Tidal Status (e.g. mid_ebb; mid-flood)
WaterDepth	N	4	1	Depth of water column in meter
SamDepthM	N	4	1	Depth of sample taken in meter
SamDepth	C	1		Depth sample taken (S = surface; M = middle; B = bottom)
WaterTemp	N	4	1	Water Temperature
Salinity	N	6	2	
DO	N	6	2	Dissolved Oxygen
DOS	N	6	2	Dissolved Oxygen in % saturation
Turbidity	N	6	2	
SS	N	6	2	Suspended solids
Metals_T ...	N	6	2	Total metals (approx. 7 parameters, and can be more)
Metals_D ...	N	6	2	Dissolved metals (approx. 7 parameters, and can be more)
Trace organic ...	N	6	2	Trace organic (e.g. PAHs, PCBs etc.. can be a lot)
Nutrients	N	6	2	Nutrients (include several parameters such as NO ₂ _N, NO ₃ _N, NH ₃ _N, TP, OP etc)
DOB	N	6	2	
COD	N	6	2	
Chlorophyll_a	N	6	2	
Ecoli	N	10	0	
Fcoliform	N	10	0	Faecal coliform
PARA ...				Other parameters not listed above. (Confirm with EPD individually)

(Remark: enter 999.99 to any numeric field that have no reading. Please note that "zero" is also a valid data)

B. Details of water analytical methods and detection limits for different parameters.

Parameter	Limits of detection for WQ parameters	Units of measurement for WQ parameters	Analytical methods
e.g. DO			
e.g. Cd_T			
etc ...			

C. Apart from A and B, the following information shall also be provided:

1. Project name, contract number, consultant name and telephone, contractor name, contact person and telephone number, site staffs and telephone.
2. Project commencement date and the proposed completion date, frequency of sampling and project work nature, e.g. dumping, dredging or reclamation.
3. List of site instrument for water quality monitoring.

Water Quality Monitoring Data Record Sheet

Monitoring Location			
Date (dd/mm/yy)			
Start Time (hh:mm)			
Weather			
Sea Conditions			
Tidal Mode			
Water Depth (m)			
Monitoring Depth	Surface	Middle	Bottom
pH			
Temperature (°C)			
Turbidity (NTU)			
Salinity (ppt)			
DO Saturation (%)			
DO (mg/l)			
SS Sample Identification			
SS (mg/L)			
Observed Construction Activities	<100m from location		
	>100m from location		
Other Observations			

Name & Designation

Signature

Date

Recorded by: _____

Checked by: _____

Note: The SS results are to be filled up once they are available from the laboratory.

**Sample Template for Interim Notifications of
Environmental Quality Limits Exceedances**

Incident Report on Action Level or Limit Level Non-compliance

Project	
Date	
Time	
Monitoring Location	
Parameter	
Action & Limit Levels	
Measured Level	
Possible reason for Action or Limit Level Non-compliance	
Actions taken / to be taken	
Remarks	

Location Plan

Prepared by: _____

Designation: _____

Signature: _____

Date: _____



Complaint Log

Ref: _____

Log Ref	Date/Location	Complainant/ Date of Contact	Details of Complaint	Investigation/Mitigation Action	File Closed

Filed by Environmental Team Leader: _____

Date: _____

Implementation Status Proforma

Ref: _____

Ref**	Environmental Protection Measures*	Implementation Status

* All recommendations and requirements resulted during the Course of EIA/EA Process, including ACE and/or accepted public comment to the proposed project.

** EIA Ref/EM&A Log Ref/Design Document Ref

Signed by Environmental Team Leader: _____

Date: _____

Audited by Independent Checker (Environment): _____

Date: _____

Site Inspection Proforma

Ref: _____

Date	Location	Req't Ref.*	Observation/Deficiency	Mitigation Action** (Responsible Agency)	Date of Confirmation***

* EIA Ref/EM&A Log Ref/Design Document Ref/Environmental Protection Contract Clause
 ** Specific Environmental Mitigation Measures should be stated, such as, equipment, processes, systems, practices or technologies.
 *** The required completed date to confirm the specified Environmental Protection Action

This Proforma is an Environmental Protection Instruction for: _____ on _____

Signed by Environmental Team Leader: _____ Date: _____

Copy to Independent Checker (Environment)

Data Recovery Schedule

Ref: _____

Date	Air Quality					Noise					Water Quality				
	Monitoring Station*					Monitoring Location*					Monitoring Location*				
	A1	A2	A3	A4	A5	N1	N2	N3	N4	N5	W1	W2	W3	W4	W5
1															
2															
3															
4															
5															
6															
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27															
28															
29															
30															
31															
% of R															

* Remark type of parameters

% of R The percentage of Data Recovery is the actual monitoring over the scheduled monitoring

Signed by Environmental Team Leader: _____

Date: _____

Copy to Independent Checker (Environment)

Proactive Environmental Protection Proforma

Ref: _____

Ref*	Proposed Construction Method**	Location/ Working Period	Anticipated Impacts	Recommended Mitigation Measures

* EIA Ref/EM&A Log Ref/Design Document Ref

** Details of equipment, vehicles, plants, processes, technologies for the option of construction method

Reviewed by Environmental Team Leader: _____

Date: _____

Approved by Independent Checker (Environment): _____

Date: _____

Regulatory Compliance Proforma

Ref: _____

Ref*	Environmental License/Permit*	Control Area/Facility/Location	Effective Date

* Name of Applicant, Business Corporation, relevant regulation and remark of license/permit conditions

** File reference of the license/permittee

Recorded by Environmental Team Leader: _____

Date: _____

Signed by Independent Checker (Environment): _____

Date: _____