Annex B1 a: Impact Water Quality Monitoring for Dredging Activities during Mid-ebb Tide for 8 October 2009

Station	Do	Downstream (Impact)					
Time (hh:mm)		13:51-15:19					
Monitoring Depth (m)	Depth Average	Depth Average Surface and Middle Bottom					
D.O. (mg/L)	N/A	N/A 5.45 5					
Turbidity (NTU)	11.84	N/A	N/A				
SS (mg/L)	16.03	N/A	N/A				
Remarks	Dredgin	Dredging works were observed.					

Station	Ups	Upstream (Reference)					
Time (hh:mm)		15:42-16:09					
Monitoring Depth (m)	Depth Average	Depth Average Surface and Middle Bottom					
D.O. (mg/L)	N/A	N/A 5.56					
Turbidity (NTU)	21.21	N/A	N/A				
SS (mg/L)	27.67	N/A	N/A				
Remarks	Dredgin	Dredging works were observed.					

Station	Ma Wan					
Time (hh:mm)	17:11-17:14					
Monitoring Depth (m)	Depth Average Surface and Middle Bottom					
D.O. (mg/L)	N/A	5.04	4.94			
Turbidity (NTU)	11.43	N/A	N/A			
SS (mg/L)	16.17	N/A	N/A			
Remarks						

Compliance with Action and Limit Levels

Compitance with Action and Limit Levels										
		Action Level	Limit Level				Compliance			
	Impact	Mean Val		Mean Value		Mean Value at	with Action	Compliance		
Parameter	Stations	Comparison between I and R (a)	Impact Stations	Comparison between I and R (a)	Stations	Reference Stations	level	with Limit Level		
DO (Bottom)	< 2.96	R significantly greater than I (t-test, $p < 0.05$)	< 2.00	R significantly greater than I (t-test, $p < 0.05$)	5.38	5.5	Y	Y		
DO (Surface and Mid Depth)	< 3.76	R significantly greater than I (t-test, $p < 0.05$)	< 3.11	R significantly greater than I (t-test, p < 0.05)	5.45	5.56	Y	Y		
Turbidity (Depth-averaged)	> 28.14	I ≥ 1.2 R (25.45)	> 38.32	I≥1.3 R (27.57)	11.84	21.21	Y	Y		
SS (Depth-averaged)	> 37.88	I≥1.2 R (33.20)	> 61.92	I≥1.3 R (35.97)	16.03	27.67	Y	Y		

Annex B1 b: Impact Water Quality Monitoring for Dredging Activities during Mid-flood Tide for 8 October 2009

Station	Do	Downstream (Impact)						
Time (hh:mm)		07:50 - 10:54						
Monitoring Depth (m)	Depth Average	Depth Average Surface and Middle Bottom						
D.O. (mg/L)	N/A	N/A 5.12 5.1						
Turbidity (NTU)	18.23	18.23 N/A I						
SS (mg/L)	22.27 N/A N/A							
Remarks	Dredgin	Dredging works were observed.						

Station	Ups	Upstream (Reference)						
Time (hh:mm)		07:50 - 10:54						
Monitoring Depth (m)	Depth Average	Depth Average Surface and Middle Bottom						
D.O. (mg/L)	N/A	5.42	5.4					
Turbidity (NTU)	31.03	31.03 N/A						
SS (mg/L)	40.67 N/A		N/A					
Remarks	Dredging works were observed.							

Station		Ma Wan						
Time (hh:mm)		07:50 - 10:54						
Monitoring Depth (m)	Depth Average	Depth Average Surface and Middle Botton						
D.O. (mg/L)	N/A	4.88	4.88					
Turbidity (NTU)	18.17	N/A	N/A					
SS (mg/L)	23.00	N/A	N/A					
Remarks		·						

Compliance with Action and Limit Levels

Compitance with Action and Emit Levels										
		Action Level		Limit Level				Compliance		
	Mean Value at				Mean Value at		Mean Value at Impact	Mean Value at	with Action	Compliance
Parameter	Impact Stations	Comparison between I a	nd R ^(a)				Stations	Reference Stations	level	with Limit Level
DO (Bottom)		R significantly greater that				R significantly greater than I (t-test, $p < 0.05$)	5.14	5.4	Y	Y
DO (Surface and Mid Depth)	< 3.76	R significantly greater that	an I (t-test, p <	0.05)	< 3.11	R significantly greater than I (t-test, p < 0.05)	5.12	5.42	Y	Y
Turbidity (Depth-averaged)	> 28.14	I ≥ 1.2 R (37.24)	> 38.32	I≥1.3 R (40.34)	18.23	31.03	Y	Y
SS (Depth-averaged)	> 37.88	I ≥ 1.2 R (48.80)	> 61.92	I≥1.3 R (52.87)	22.27	40.67	Y	Y

Note: (a) I = Impact; R = Reference Stations