Annex A - Environmental Monitoring and Audit Sampling Schedule for South of The Brothers (July 2012 - December 2017)

			2012						2013												2014												2015												2016												2017											
Baseline Monitoring Prior to Dredging	**Code**	**Frequency**	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Far Field Stations																																																																				
	SB-WFA	3 days per week for 4 weeks	*	*																																																																
	SB-WFB	3 days per week for 4 weeks	*	*																																																																
Mid Field Stations																																																																				
	SB-WMA	3 days per week for 4 weeks	*	*																																																																
	SB-WMB	3 days per week for 4 weeks	*	*																																																																
Near Field Stations																																																																				
	SB-WNAA	3 days per week for 4 weeks	*	*																																																																
	SB-WNAB	3 days per week for 4 weeks	*	*																																																																
	SB-WNBA	3 days per week for 4 weeks	*	*																																																																
	SB-WNBB	3 days per week for 4 weeks	*	*																																																																
Reference Stations																																																																				
	NM1	3 days per week for 4 weeks	*	*																																																																
	NM2	3 days per week for 4 weeks	*	*																																																																
	NM3	3 days per week for 4 weeks	*	*																																																																
	NM5	3 days per week for 4 weeks	*	*																																																																
	NM6	3 days per week for 4 weeks	*	*																																																																
Sensitive Receiver Stations																																																																				
	MW1	3 days per week for 4 weeks	*	*																																																																
	THB1	3 days per week for 4 weeks	*	*																																																																
	THB2	3 days per week for 4 weeks	*	*																																																																
	WSR45C	3 days per week for 4 weeks	*	*																																																																
	WSR46	3 days per week for 4 weeks	*	*																																																																

Impact Monitoring for Dredging			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Upstream Stations																																																																					
	US1	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	US2	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
Downstream Stations																																																																				
	DS1	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	DS2	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	DS3	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	DS4	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	DS5	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
Sensitive Receiver Stations																																																																				
	MW1	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	THB1	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	THB2	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	WSR45C	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								
	WSR46	3 days per week					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*																																								

Pit Specific Sediment Chemistry			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
SB CMP 1 Active																																																																					
Near-Pit																																																																				
	SB-NNAA	Monthly															12	12	12	12	12	12	12	12	12	12	12	12																																									
	SB-NNAB	Monthly															12	12	12	12	12	12	12	12	12	12	12	12																																									
Pit-Edge																																																																				
	SB-NEAA	Monthly															12	12	12	12	12	12	12	12	12	12	12	12																																									
	SB-NEAB	Monthly															12	12	12	12	12	12	12	12	12	12	12	12																																									
Active-Pit																																																																				
	SB-NPAA	Monthly															12	12	12	12	12	12	12	12	12	12	12	12																																									
	SB-NPAB	Monthly															12	12	12	12	12	12	12	12	12	12	12	12																																									
SB CMP 2 Active																																																																				
Near-Pit																																																																				
	SB-NNBA	Monthly																											12	12	12	12	12	12	12	12	12	12	12	12																																			
	SB-NNBB	Monthly																											12	12	12	12	12	12	12	12	12	12	12	12																																			
Pit-Edge																																																																				
	SB-NEBA	Monthly																											12	12	12	12	12	12	12	12	12	12	12	12																																			
	SB-NEBB	Monthly																											12	12	12	12	12	12	12	12	12	12	12	12																																			
Active-Pit																																																																				
	SB-NPBA	Monthly																											12	12	12	12	12	12	12	12	12	12	12	12																																			
	SB-NPBB	Monthly																											12	12	12	12	12	12	12	12	12	12	12	12																																			

Annex A - Environmental Monitoring and Audit Sampling Schedule for South of The Brothers (July 2012 - December 2017)

			2012						2013												2014												2015												2016												2017											
Cumulative Impact Sediment Chemistry			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Near-field Stations																																																																				
	SB-RNA	4 times per year																		12		12				12		12				12		12				12		12				12																								
	SB-RNB	4 times per year																		12		12				12		12				12		12				12		12				12																								
Mid-field Stations																																																																				
	SB-RMA	4 times per year																		12		12				12		12				12		12				12		12				12																								
	SB-RMB	4 times per year																		12		12				12		12				12		12				12		12				12																								
Far-Field Stations																																																																				
	SB-RFA	4 times per year																		12		12				12		12				12		12				12		12				12																								
	SB-RFB	4 times per year																		12		12				12		12				12		12				12		12				12																								
Capped Pit Stations																																																																				
	SB-RCA	4 times per year																		12		12				12		12				12		12				12		12				12																								
	SB-RCB	4 times per year																		12		12				12		12				12		12				12		12				12																								
Sensitive Receiver Stations																																																																				
	MW1	4 times per year																		12		12				12		12				12		12				12		12				12																								
	THB1	4 times per year																		12		12				12		12				12		12				12		12				12																								
	THB2	4 times per year																		12		12				12		12				12		12				12		12				12																								

Sediment Toxicity Tests			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
SB CMP 1 Active																																																																				
Reference																																																																				
	SB-TRA	2 times per year																				5																																													
	SB-TRB	2 times per year																				5																																													
Near-Field																																																																				
	SB-TAA	2 times per year																				5																																													
	SB-TAB	2 times per year																				5																																													
Sensitive Receiver Stations																																																																				
	MW1	2 times per year																				5																																													
	THB1	2 times per year																				5																																													
	THB2	2 times per year																				5																																													
SB CMP 2 Active																																																																				
Reference																																																																				
	SB-TRA	2 times per year																										5						5						5																														
	SB-TRB	2 times per year																										5						5						5																														
Near-Field																																																																				
	SB-TBA	2 times per year																										5						5						5																														
	SB-TBB	2 times per year																										5						5						5																														
Sensitive Receiver Stations																																																																				
	MW1	2 times per year																										5						5						5																														
	THB1	2 times per year																										5						5						5																														
	THB2	2 times per year																										5						5						5																														

Tissue/ Whole Body Sampling			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Near-Pit Stations																																																																				
	SB-INA	2 times per year																				*						*						*						*																											
	SB-INB	2 times per year																				*						*						*						*																											
Reference North																																																																				
	TNA	2 times per year																				*						*						*						*																											
	TNB	2 times per year																				*						*						*						*																											
Reference South																																																																				
	TSA	2 times per year																				*						*						*						*																											
	TSB	2 times per year																				*						*						*						*																											

Demersal Trawling			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Impact																																																																				
	SB-INA 1-5	4 times per year																			5	5					5	5					5	5					5	5																													
	SB-INB 1-5	4 times per year																			5	5					5	5					5	5					5	5																													
Reference North																																																																				
	TNA 1-5	4 times per year																			5	5					5	5					5	5					5	5																													
	TNB 1-5	4 times per year																			5	5					5	5					5	5					5	5																													
Reference South																																																																				
	TSA 1-5	4 times per year																			5	5					5	5					5	5					5	5																													
	TSB 1-5	4 times per year																			5	5					5	5					5	5					5	5																													

Annex A - Environmental Monitoring and Audit Sampling Schedule for South of The Brothers (July 2012 - December 2017)

			2012						2013												2014												2015												2016												2017											
Routine Water Quality Monitoring			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Ebb Tide																																																																				
Impact Stations Downcurrent																																																																				
	SB-IPE1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-IPE2	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-IPE3	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-IPE4	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-IPE5	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
Intermediate Stations Downcurrent																																																																				
	SB-INE1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-INE2	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-INE3	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-INE4	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-INE5	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
Reference Stations Upcurrent																																																																				
	SB-RFE1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-RFE2	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-RFE3	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-RFE4	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-RFE5	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
Sensitive Receiver Stations																																																																				
	MW1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	THB1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	THB2	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	WSR45C	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	WSR46	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
Flood Tide																																																																				
Impact Stations Downcurrent																																																																				
	SB-IPF1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-IPF2	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-IPF3	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
Intermediate Stations Downcurrent																																																																				
	SB-INF1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-INF2	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-INF3	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
Reference Stations Upcurrent																																																																				
	SB-RFF1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-RFF2	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	SB-RFF3	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
Sensitive Receiver Stations																																																																				
	MW1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	THB1	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	THB2	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	WSR45C	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											
	WSR46	8 times per year																8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8		8	8																											

Water Column Profiling			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Plume Stations	WCP1	Monthly																4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	WCP2	Monthly																4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Annex A - Environmental Monitoring and Audit Sampling Schedule for South of The Brothers (July 2012 - December 2017)

			2012						2013												2014												2015												2016												2017											
Capping Water Quality Monitoring			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Ebb Tide																																																																				
Impact Stations Downcurrent																																																																				
	SB-IPE1	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-IPE2	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-IPE3	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-IPE4	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-IPE5	8 times per year																																											3	3		3	3		3	3		3	3														
Intermediate Stations Downcurrent																																																																				
	SB-INE1	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-INE2	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-INE3	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-INE4	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-INE5	8 times per year																																											3	3		3	3		3	3		3	3														
Reference Stations Upcurrent																																																																				
	SB-RFE1	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-RFE2	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-RFE3	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-RFE4	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-RFE5	8 times per year																																											3	3		3	3		3	3		3	3														
Sensitive Receiver Stations																																																																				
	MW1	8 times per year																																											3	3		3	3		3	3		3	3														
	THB1	8 times per year																																																																			
	THB2	8 times per year																																																																			
	WSR45C	8 times per year																																											3	3		3	3		3	3		3	3														
	WSR46	8 times per year																																											3	3		3	3		3	3		3	3														
Flood Tide																																																																				
Impact Stations Downcurrent																																																																				
	SB-IPF1	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-IPF2	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-IPF3	8 times per year																																											3	3		3	3		3	3		3	3														
Intermediate Stations Downcurrent																																																																				
	SB-INF1	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-INF2	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-INF3	8 times per year																																											3	3		3	3		3	3		3	3														
Reference Stations Upcurrent																																																																				
	SB-RFF1	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-RFF2	8 times per year																																											3	3		3	3		3	3		3	3														
	SB-RFF3	8 times per year																																											3	3		3	3		3	3		3	3														
Sensitive Receiver Stations																																																																				
	MW1	8 times per year																																											3	3		3	3		3	3		3	3														
	THB1	8 times per year																																																																			
	THB2	8 times per year																																																																			
	WSR45C	8 times per year																																											3	3		3	3		3	3		3	3														
	WSR46	8 times per year																																											3	3		3	3		3	3		3	3														

Benthic Recolonisation Studies			J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Capped Contaminated Mud Pits																																																																					
	SB-CPA	2 times per year																																																	12				12										12				12
	SB-CPB	2 times per year																																																	12				12										12				12
																																																		12				12										12				12
Reference Stations																																																																				
	RBA	2 times per year																																																	12				12										12				12
	RBB	2 times per year																																																	12				12										12				12
	RBC	2 times per year																																																	12				12										12				12

Notes:
"*" = Number of replicates depends on parameters
Naming of stations are tentative only and will be subjected to changes