

**Contract No. HY/2012/08  
Tuen Mun – Chek Lap Kok Link –  
Northern Connection Sub-sea Tunnel  
Section**

*Eighteenth Monthly Environmental Monitoring &  
Audit (EM&A) Report*

13 May 2015

**Environmental Resources Management**  
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# Contract No. HY/2012/08





## Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section

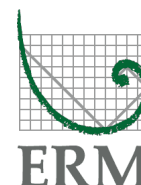
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*Eighteenth Monthly Environmental Monitoring & Audit (EM&A) Report*

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Client:  DBJV		Project No:  0212330			
Summary:  This document presents the Eighteenth Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section.		Date: 13 May 2015			
		Approved by:  			
		Mr Craig Reid Partner			
		Certified by:  			
		Mr Jovy Tam ET Leader			
	18 <sup>th</sup> Monthly EM&A Report	VAR	JT	CAR	13/05/15
Revision	Description	By	Checked	Approved	Date
<p>This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.</p> <p>We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.</p>		<p>Distribution</p> <p><input type="checkbox"/> Internal</p> <p><input checked="" type="checkbox"/> Public</p> <p><input type="checkbox"/> Confidential</p>			
		 			



Ref.: HYDHZMBEEM00\_0\_2961L.15

14 May 2015

AECOM  
Supervising Officer Representative's Office  
No.8 Mong Fat Street, Tuen Mun,  
New Territories, Hong Kong

By Fax (2293 6300) and By Post

Attention: Messrs. Edwin Ching / Andy Westmoreland

Dear Sirs,

**Re: Agreement No. CE 48/2011 (EP)  
Environmental Project Office for the  
HZMB Hong Kong Link Road, HZMB Hong Kong Boundary Crossing Facilities,  
and Tuen Mun-Chek Lap Kok Link – Investigation**

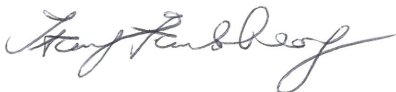
**Contract No. HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section  
Monthly EM&A Report for April 2015 (EP-354/2009/D)**

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report (for April 2015) certified by the ET Leader (ET's ref.: "0212330\_18th Monthly EM&A\_20150513.doc" dated 13 May 2015) and provided to us via e-mail on 13 May 2015.

We are pleased to inform you that we have no adverse comments on the captioned monthly EM&A Report. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/D.

Thank you for your kind attention. Please do not hesitate to contact the undersigned or the ENPO Leader Mr. Y. H. Hui should you have any queries.

Yours sincerely,



F. C. Tsang  
Independent Environmental Checker  
Tuen Mun – Chek Lap Kok Link

c.c. HyD – Mr. Stephen Chan (By Fax: 3188 6614)  
HyD – Mr. Matthew Fung (By Fax: 3188 6614)  
AECOM – Mr. Conrad Ng (By Fax: 3922 9797)  
ERM – Mr. Jovy Tam (By Fax: 2723 5660)  
Dragages – Bouygues JV – Mr. C. F. Kwong (By Fax: 2293 7499)

Internal: DY, YH, SLUI, ENPO Site

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## EXECUTIVE SUMMARY

Under *Contract No. HY/2012/08*, Dragages – Bouygues Joint Venture (DBJV) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Northern Connection Sub-sea Tunnel Section of the Tuen Mun – Chek Lap Kok Link Project (TM-CLK Link Project) while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET) in accordance with *Environmental Permit No. EP-354/2009/A*. ENVIRON Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO). Subsequent applications for variation of environmental permits (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

The construction phase of the Project commenced on 1 November 2013 and will tentatively be completed by the end of 2018. The impact monitoring of the EM&A programme, including air quality, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.

This is the Eighteenth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 30 April 2015 for the *Contract No. HY/2012/08 Northern Connection Sub-sea Tunnel Section* (the “Project”) in accordance with the Updated EM&A Manual of the TM-CLK Link Project. As informed by the Contractor, major activities in the reporting period included:

### *Land-based Works*

- Surcharge Set Up at Works Area – Portion N-C;
- Land-based Sheet Piling Works at Works Area – Portion N-A;
- Diaphragm Wall Construction for Ventilation Shaft at Works Area – Portion N-C;
- TBM Platform Construction at Works Area – Portion N-A;
- Delivery & Assembly of TBM at Works Area – Portion N-A and,
- Set up of Slurry Treatment Plant at Works Area – Portion N-C.

A summary of monitoring and audit activities conducted in the reporting period is listed below:

24-hour TSP Monitoring	10 sessions
1-hour TSP Monitoring	10 sessions
Impact Water Quality Monitoring	13 sessions
Impact Dolphin Monitoring	2 sessions
Joint Environmental Site Inspection	5 sessions

#### *Implementation of Marine Mammal Exclusion Zone*

There was no dredging, reclamation or marine sheet piling works in open waters during this reporting period. Thus, Passive Acoustic Monitoring (PAM) and the day-time monitoring of Dolphin Exclusion Zone (DEZ) by dolphin observers were not in effect during the reporting period.

#### Summary of Breaches of Action/Limit Levels

##### *Breaches of Action and Limit Levels for Air Quality*

No Action Level or Limit Level of air quality exceedances were recorded in the air quality monitoring of this reporting month.

##### *Breaches of Action and Limit Levels for Water Quality*

No Action Level or Limit Level of water quality exceedances were recorded in the water quality monitoring of this reporting month.

#### Environmental Complaints, Non-compliance & Summons

No non-compliance with EIA recommendations, EP conditions and other requirements associated with the construction of this Contract was recorded in this reporting period.

No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

#### Reporting Change

There was no reporting change required in the reporting period.

## Upcoming Works for the Next Reporting Month

Works to be undertaken in the next monitoring period of May 2015 include the following:

### *Land-based Works*

- Excavation for Ventilation Shaft at Works Area – Portion N-C;
- Surcharge Set Up at Works Area – Portion N-C;
- Land-based Sheet Piling Works at Works Area – Portion N-A;
- Diaphragm Wall Construction for Ventilation Shaft at Works Area – Portion N-C;
- TBM Platform Construction at Works Area – Portion N-A;
- Delivery & Assembly of TBM at Works Area – Portion N-A ; and
- Set up of Slurry Treatment Plant at Works Area – Portion N-C.

### Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of May 2015 are expected to be mainly associated with dust, marine water quality, marine ecology and waste management.



## 1.1

## BACKGROUND

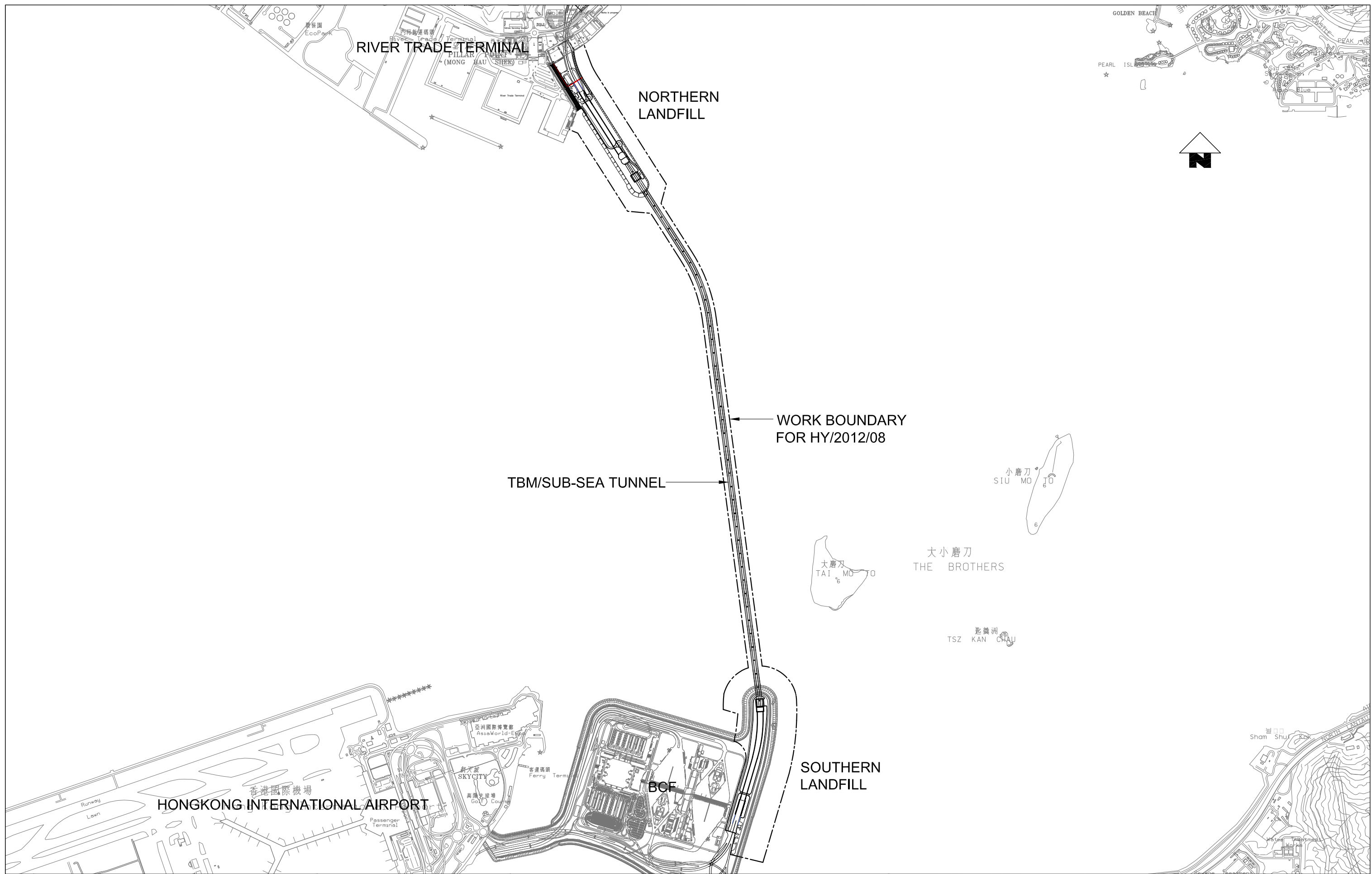
According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated increase in cross boundary traffic, developments in the Northwest New Territories (NWNT), and possible developments in North Lantau, including the Airport developments, the Lantau Logistics Park (LLP) and the Hong Kong – Zhuhai – Macao Bridge (HZMB). In order to cope with the anticipated traffic demand, two new road sections between NWNT and North Lantau – Tuen Mun – Chek Lap Kok Link (TM-CLKL) and Tuen Mun Western Bypass (TMWB) are proposed.

An Environmental Impact Assessment (EIA) of TM-CLKL (the Project) was prepared in accordance with the EIA Study Brief (No. ESB-175/2007) and the *Technical Memorandum of the Environmental Impact Assessment Process (EIAO-TM)*. The EIA Report was submitted under the Environmental Impact Assessment Ordinance (EIAO) in August 2009. Subsequent to the approval of the EIA Report (EIAO Register Number AEIAR-146/2009), an Environmental Permit (EP-354/2009) for TM-CLKL was granted by the Director of Environmental Protection (DEP) on 4 November 2009, and EP variation (VEP) (EP-354/2009A) was issued on 8 December 2010. Subsequent applications for variation of environmental permits (VEPs), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.





Under *Contract No. HY/2012/08*, Dragages – Bouygues Joint Venture (DBJV) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Northern Connection Sub-sea Tunnel Section of TM-CLKL while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET). ENVIRON Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO).

Layout of the Contract components is presented in *Figure 1.1*.

The construction phase of the Contract commenced on 1 November 2013 and will tentatively be completed by 2018. The impact monitoring phase of the EM&A programme, including air quality, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.



Designed By	PKV
Drawn By	DAI
Approved By	SPo
Date	11SEP2013
Rev.	Description
A	FIRST ISSUE
	11SEP13
	PKV
	Checked

Main Contractor	 
Client	
Contractor's Designer	



  
 A member of the Bouygues Construction group  
 Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營


  
 路政署  
 HIGHWAYS DEPARTMENT


 Ove Arup & Partners  
 Hong Kong Limited

Project Contract No. HY/2012/08  
 Tuen Mun - Chek Lap Kok Link -  
 Northern Connection Sub-Sea Tunnel Section  
 Drawing Title **Figure 1.1**

Drawing no.	TMCLKL8-DBJ-GEN-DWG-00174
Scale	1:25000 @ A3
CADD Ref.	TMCLKL8-DBJ-GEN-DWG-00174-DFT-A
Issue Status	DFT (DRAFT)
Revision	A

## 1.2 SCOPE OF REPORT

This is the Eighteenth Monthly EM&A Report under the *Contract No. HY/2012/08 Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section*. This report presents a summary of the environmental monitoring and audit works in April 2015.

## 1.3 ORGANIZATION STRUCTURE

The organization structure of the Contract is shown in *Appendix A*. The key personnel contact names and contact details are summarized in *Table 1.1* below.

**Table 1.1** *Contact Information of Key Personnel*

Party	Position	Name	Telephone	Fax
Highways Department	Engr 16/HZMB	Kenneth Lee	2762 4996	3188 6614
SOR (AECOM Asia Company Limited)	Chief Resident Engineer	Edwin Ching	2293 6388	2293 6300
		Andrew Westmoreland	2293 6360	2293 6300
ENPO / IEC (ENVIRON Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2888	3465 2899
	IEC	Dr. F.C. Tsang	3465 2828	3465 2899
Contractor (Dragages – Bouygues Joint Venture)	Environmental Manager	C.F. Kwong	2293 7322	2670 2798
	Environmental Officer	Bryan Lee	2293 7323	2670 2798
	24-hour complaint hotline	Rachel Lam	2293 7342	
ET (ERM-HK)	ET Leader	Jovy Tam	2271 3113	2723 5660

## 1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of this Contract was commenced on 1 November 2013. The construction programme is shown in *Appendix B*.

As per DBJV's information, details of major construction works carried out in this reporting period are summarized in *Table 1.2*.

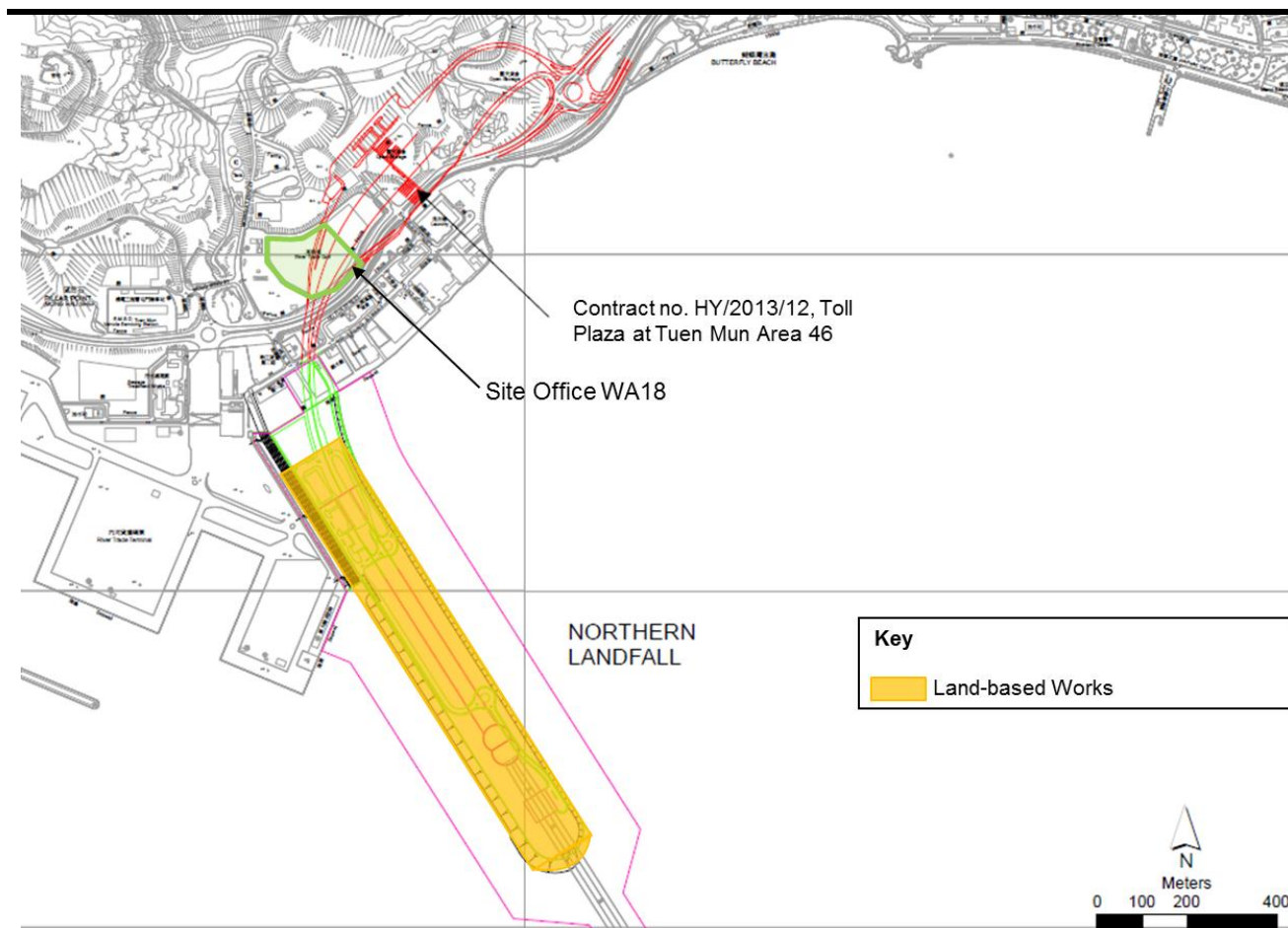
The general layout plan of the site showing the detailed works areas is shown in *Figure 1.2*. The Environmental Sensitive Receivers in the vicinity of the Project are shown in *Figure 1.3*.

The implementation schedule of environmental mitigation measures is presented in *Appendix C*.

**Table 1.2** *Summary of Construction Activities Undertaken during the Reporting Period*

Construction Activities Undertaken
<i>Land-based Works</i>
<ul style="list-style-type: none"> <li>• Surcharge Set Up at Works Area - Portion N-C;</li> <li>• Land-based Sheet Piling Works at Works Area - Portion N-A;</li> <li>• Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C;</li> <li>• TBM Platform Construction at Works Area - Portion N-A;</li> <li>• Delivery &amp; Assembly of TBM at Works Area - Portion N-A; and</li> <li>• Set up of Slurry Treatment Plant at Works Area - Portion N-C.</li> </ul>

**Figure 1.2** *Locations of Construction Activities - April 2015*



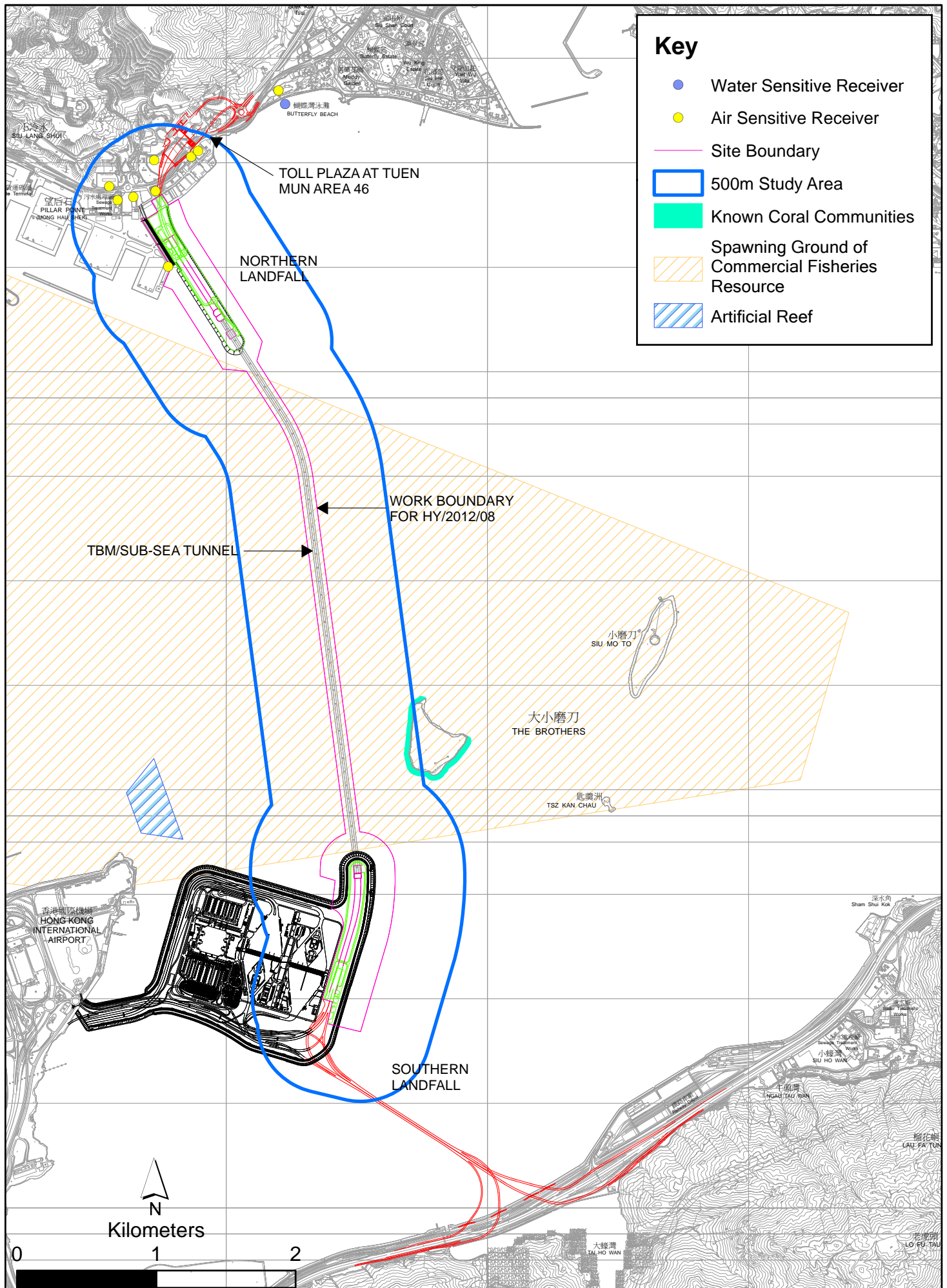


Figure 1.3 Environmental Sensitive Receivers in the vicinity of Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-Sea Tunnel Section

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Date: 15/4/2014

The EM&A programme required environmental monitoring for air quality, water quality and marine ecology as well as environmental site inspections for air quality, noise, water quality, waste management, marine ecology and landscape and visual impacts. The EM&A requirements and related findings for each component are summarized in the following sections

## 2.1 AIR QUALITY

### 2.1.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual and the Enhanced TSP Monitoring Plan, impact 1-hour TSP monitoring was conducted three (3) times every six (6) days and impact 24-hour TSP monitoring was carried out once every six (6) days when the highest dust impact was expected. 1-hr and 24-hr TSP monitoring frequency was increased to three times per day every three days and daily every three days, respectively, as excavation works for launching shaft commenced on 24 October 2014.

High volume samplers (HVSs) were used to carry out the 1-hour and 24-hour TSP monitoring on 3, 6, 9, 12, 15, 18, 21, 24, 27, 30 April 2015 at the five (5) air quality monitoring stations in accordance with the requirements stipulated in the Updated EM&A Manual (*Figure 2.1; Table 2.1*). Wind meter was installed at the rooftop of ASR5 for logging wind speed and wind direction. Details of the equipment deployed are provided in *Table 2.2*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

**Table 2.1** *Locations of Impact Air Quality Monitoring Stations and Monitoring Dates in this Reporting Period*

Monitoring Station	Monitoring Dates	Location	Description	Parameters & Frequency
ASR1	3, 6, 9, 12, 15, 18, 21, 24, 27, 30 April 2015	Tuen Mun Fireboat Station	Office	TSP monitoring <ul style="list-style-type: none"> <li>1-hour Total Suspended Particulates (1-hour TSP, <math>\mu\text{g}/\text{m}^3</math>), 3 times in every 6 days</li> <li>24-hour Total Suspended Particulates (24-hour TSP, <math>\mu\text{g}/\text{m}^3</math>), daily for 24-hour in every 6 days</li> </ul>
ASR5		Pillar Point Fire Station	Office	Enhanced TSP monitoring (commenced on 24 October 2014) <ul style="list-style-type: none"> <li>1-hour Total Suspended Particulates (1-hour TSP, <math>\mu\text{g}/\text{m}^3</math>), 3 times in every 3 days</li> <li>24-hour Total Suspended Particulates (24-hour TSP, <math>\mu\text{g}/\text{m}^3</math>), daily for 24-hour in every 3 days</li> </ul>
AQMS1		Previous River Trade Golf	Bare ground	
ASR6		Butterfly Beach Laundry	Office	
ASR10		Butterfly Beach Park	Recreational uses	

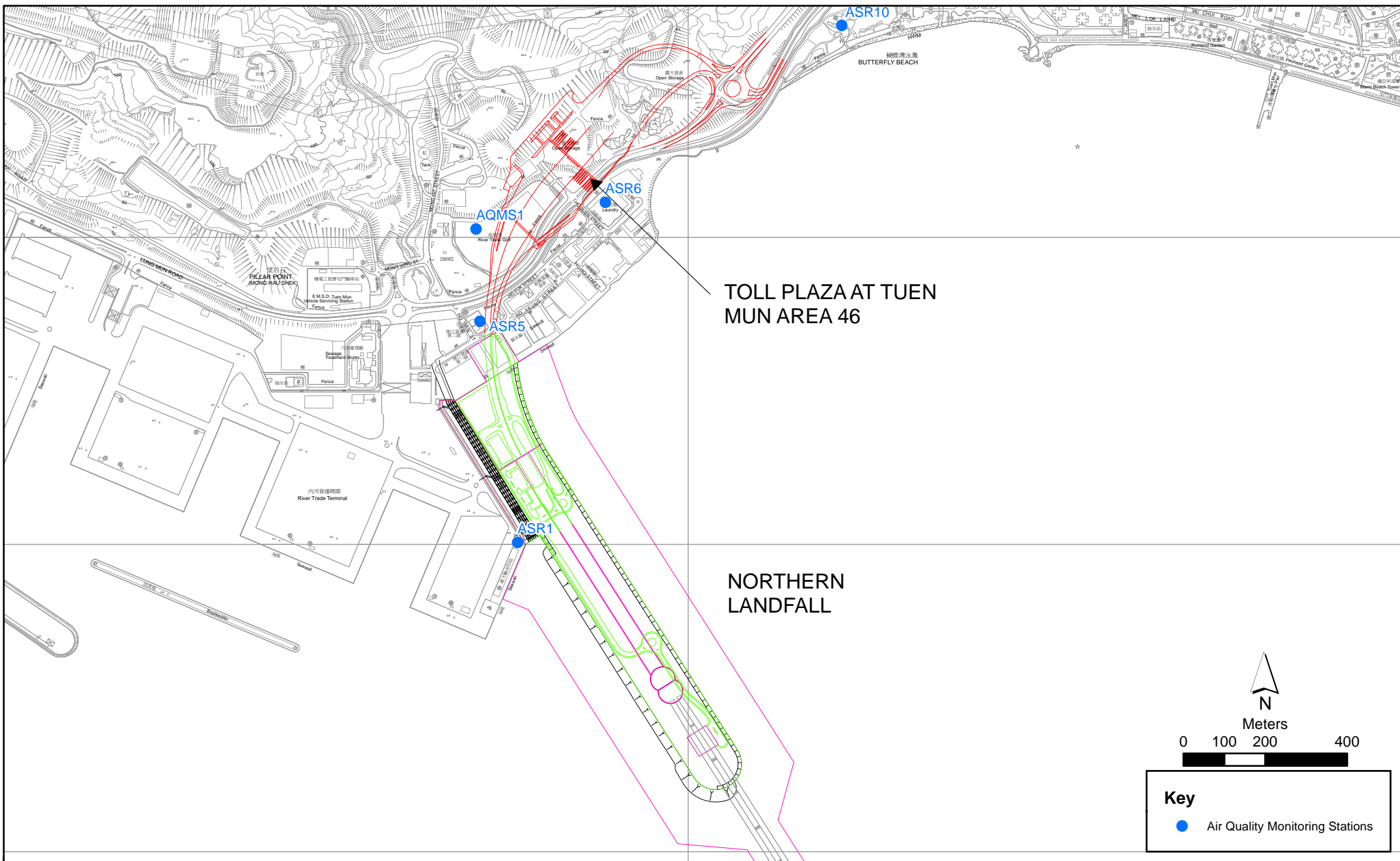


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring

**Table 2.2** *Air Quality Monitoring Equipment*

<b>Equipment</b>	<b>Brand and Model</b>
High Volume Sampler (1-hour TSP and 24-hour TSP)	Tisch Environmental Mass Flow Controlled Total Suspended Particulate (TSP) High Volume Sampler (Model No. TE-5170)
Wind Meter	Davis (Model: Weather Wizard III (S/N: WE90911A30)
Wind Anemometer for calibration	Lutron (Model No. AM-4201)

**2.1.2** *Action & Limit Levels*

The Action and Limit Levels of the air quality monitoring is provided in *Appendix D*. The Event and Action plan is presented in *Appendix K*.

**2.1.3** *Monitoring Schedule for the Reporting Month*

The schedule for air quality monitoring in April 2015 is provided in *Appendix F*.

**2.1.4** *Results and Observations*

The monitoring results for 1-hour TSP and 24-hour TSP are summarized in *Tables 2.3* and *2.4*, respectively. Detailed impact air quality monitoring results and graphical presentations are presented in *Appendix G*.

**Table 2.3** *Summary of 1-hour TSP Monitoring Results in this Reporting Period*

<b>Station</b>	<b>Average (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Range (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Action Level (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Limit Level (<math>\mu\text{g}/\text{m}^3</math>)</b>
ASR1	143	65 – 289	331	500
ASR5	167	76 – 285	340	500
AQMS1	128	68 – 216	335	500
ASR6	138	71 – 265	338	500
ASR10	94	54 – 188	337	500

**Table 2.4** *Summary of 24-hour TSP Monitoring Results in this Reporting Period*

<b>Station</b>	<b>Average (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Range (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Action Level (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Limit Level (<math>\mu\text{g}/\text{m}^3</math>)</b>
ASR1	87	55 – 128	213	260
ASR5	90	62 – 126	238	260
AQMS1	77	56 – 114	213	260
ASR6	79	57 – 133	238	260
ASR10	74	50 – 130	214	260

The weather condition during the monitoring period varied from sunny to cloudy. The major dust sources in the reporting period include construction activities under the Contract as well as nearby traffic emissions.

A total of ten monitoring events were undertaken in which no Action or Limit Level exceedances of 1-hr TSP were recorded in this reporting month. No Action or Limit Level exceedances for 24-hr TSP were record.



Meteorological information collected at the ASR5, including wind speed and wind direction, is provided in *Appendix H*.

## 2.2 WATER QUALITY MONITORING

### 2.2.1 Monitoring Requirements & Equipment

In accordance with the Updated EM&A Manual, impact water quality monitoring was carried out three days per week during the construction period at nine (9) water quality monitoring stations (*Figure 2.2; Table 2.5*).

**Table 2.5** *Locations of Water Quality Monitoring Stations and the Corresponding Monitoring Requirements*

Station ID	Type	Coordinates		*Parameters, unit	Depth	Frequency
		Easting	Northing			
IS12	Impact Station	813218	823681	• Temperature(°C)	3 water depths: 1m	Impact monitoring: 3 days per week, at mid-flood and mid-ebb tides during the construction period of the Contract.
IS13	Impact Station	813667	824325	• pH(pH unit)	below sea surface,	
IS14	Impact Station	812592	824172	• Turbidity (NTU)	mid-depth and 1m	
IS15	Impact Station	813356	825008	• Water depth (m)	above sea bed. If	
CS4	Control / Far	810025	824004	• Salinity (ppt)	the water depth is	
	Field Station			• DO (mg/L and	less than 3m, mid-	
CS6	Control / Far	817028	823992	% of	depth sampling	
	Field Station			saturation)	only. If water	
SR8	Sensitive receiver (Gazettal beaches in Tuen Mun)	816306	825715	• SS (mg/L)	depth less than 6m, mid-depth may be omitted.	
SR9	Sensitive receiver (Butterfly Beach)	813601	825858			
SR10A	Sensitive receiver (Ma Wan FCZ)	823741	823495			

\*Notes:  
In addition to the parameters presented monitoring location/position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or works underway nearby were also recorded.

*Table 2.6* summarizes the equipment used in the impact water quality monitoring programme. Copies of the calibration certificates are attached in *Appendix E*.

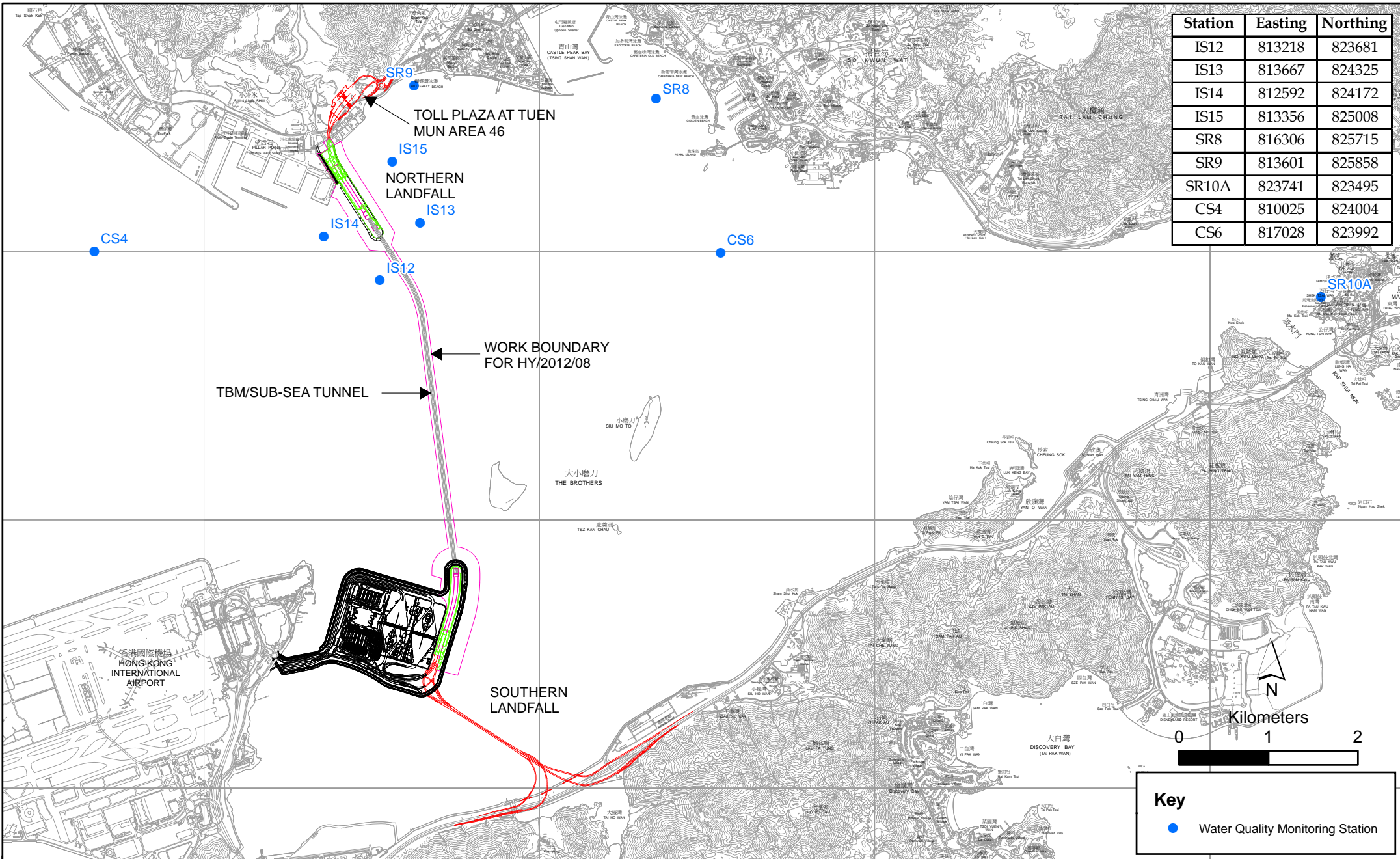


Figure 2.2

Water Quality Monitoring Station

**Table 2.6** *Water Quality Monitoring Equipment*

<b>Equipment</b>	<b>Model</b>
Water Sampler	Kahlsico Water-Bottle Model 135DW 150
Dissolved Oxygen Meter	YSI Pro 2030
pH Meter	HANNA HI 8314
Turbidity Meter	HACH 2100Q
Monitoring Position Equipment	“Magellan” Handheld GPS Model explorer GC DGPS Kodon KGP913MK2 <sup>(1)</sup>

### 2.2.2 *Action & Limit Levels*

The Action and Limit levels of water quality impact monitoring are shown in *Appendix D*. The Event and Action plan is presented in *Appendix K*.

### 2.2.3 *Monitoring Schedule for the Reporting Month*

The schedule for water quality monitoring in April 2015 is provided in *Appendix F*.

### 2.2.4 *Results and Observations*

During this reporting period, no marine works was carried out in this Contract. It is useful to note that heavy marine traffic (not associated with the Project) was commonly observed nearby the Project site and its vicinity.

Impact water quality monitoring was conducted at all designated monitoring stations in the reporting month. Results and graphical presentations of impact water quality monitoring are presented in *Appendix I*.

In this reporting period, a total of thirteen monitoring events were undertaken in which no Action Level or Limit Levels of exceedances for impact water quality monitoring was recorded.

## 2.3 *DOLPHIN MONITORING*

### 2.3.1 *Monitoring Requirements*

Impact dolphin monitoring is required to be conducted by a qualified dolphin specialist team to evaluate whether there have been any effects on the dolphins. In order to fulfil the EM&A requirements and make good use of available resources, the on-going impact line transect dolphin monitoring data collected by HyD’s *Contract No. HY/2011/03 Hong Kong-Zhuhai-Macao Bridge. Hong Kong Link Road - Section between Scenic Hill and Hong Kong Boundary Crossing Facilities* on the monthly basis is adopted to avoid duplicates of survey effort.

### 2.3.2 *Monitoring Equipment*

*Table 2.7* summarises the equipment used for the impact dolphin monitoring.

**Table 2.7** *Dolphin Monitoring Equipment*

<b>Equipment</b>	<b>Model</b>
Global Positioning System (GPS)	Garmin 18X-PC Geo One Phottix
Camera	Nikon D90 300m 2.8D fixed focus Nikon D90 20-300m zoom lens
Laser Binocular	Infinitor LRF 1000
Marine Binocular	Bushell 7 x 50 marine binocular with compass and reticules
Vessel for Monitoring	65 foot single engine motor vessel with viewing platform 4.5m above water level

**2.3.3** *Monitoring Parameter, Frequencies & Duration*

Dolphin monitoring should cover all transect lines in Northeast Lantau (NEL) and the Northwest Lantau (NWL) survey areas twice per month throughout the entire construction period. The monitoring data should be compatible with, and should be made available for, long-term studies of small cetacean ecology in Hong Kong. In order to provide a suitable long-term dataset for comparison, identical methodology and line transects employed in baseline dolphin monitoring was followed in the impact dolphin monitoring.

**2.3.4** *Monitoring Location*

The impact dolphin monitoring was carried out in the NEL and NWL along the line transect as depicted in *Figure 2.3*. The co-ordinates of all transect lines are shown in *Table 2.8* below.

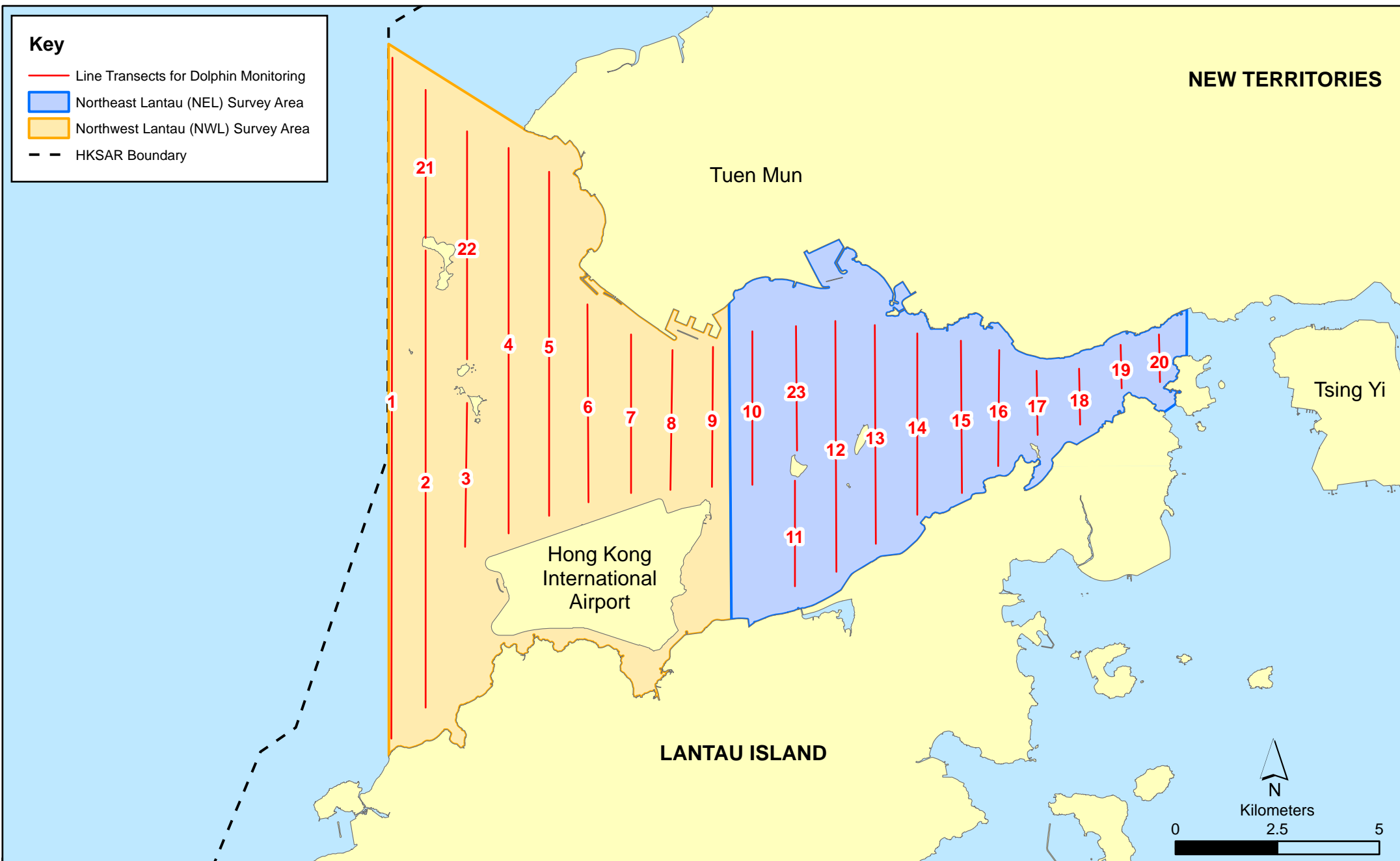


Figure 2.3

Layout of Transect Lines of Dolphin Monitoring in Northwest and Northeast Lantau Areas

**Table 2.8 Impact Dolphin Monitoring Line Transect Co-ordinates**

Line No.		Easting	Northing	Line No.		Easting	Northing
1	Start Point	804671	814577	13	Start Point	816506	819480
1	End Point	804671	831404	13	End Point	816506	824859
2	Start Point	805475	815457	14	Start Point	817537	820220
2	End Point	805477	826654	14	End Point	817537	824613
3	Start Point	806464	819435	15	Start Point	818568	820735
3	End Point	806464	822911	15	End Point	818568	824433
4	Start Point	807518	819771	16	Start Point	819532	821420
4	End Point	807518	829230	16	End Point	819532	824209
5	Start Point	808504	820220	17	Start Point	820451	822125
5	End Point	808504	828602	17	End Point	820451	823671
6	Start Point	809490	820466	18	Start Point	821504	822371
6	End Point	809490	825352	18	End Point	821504	823761
7	Start Point	810499	820690	19	Start Point	822513	823268
7	End Point	810499	824613	19	End Point	822513	824321
8	Start Point	811508	820847	20	Start Point	823477	823402
8	End Point	811508	824254	20	End Point	823477	824613
9	Start Point	812516	820892	21	Start Point	805476	827081
9	End Point	812516	824254	21	End Point	805476	830562
10	Start Point	813525	820872	22	Start Point	806464	824033
10	End Point	813525	824657	22	End Point	806464	829598
11	Start Point	814556	818449	23	Start Point	814559	821739
11	End Point	814556	820992	23	End Point	814559	824768
12	Start Point	815542	818807				
12	End Point	815542	824882				

**2.3.5 Action & Limit Levels**

The Action and Limit levels of impact dolphin monitoring are shown in *Appendix D*. The Event and Action plan is presented in *Appendix K*.

### 2.3.6 *Monitoring Schedule for the Reporting Month*

Dolphin monitoring was carried out on 8, 10, 17 and 22 of April 2015. The dolphin monitoring schedule for the reporting month is shown in *Appendix F*.

### 2.3.7 *Results & Observations*

A total of 300.70 km of survey effort was collected, with 95.5% of the total survey effort being conducted under favourable weather conditions (ie Beaufort Sea State 3 or below with good visibility) in April 2015. Amongst the two areas, 114.40 km and 186.30 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 217.91 km and 82.79 km, respectively. The survey efforts are summarized in *Appendix J*.

A total of 3 groups of thirteen Chinese White Dolphin sightings were recorded during the two sets of surveys in April 2015. All sightings were made in NWL during the survey in April 2015, while no dolphin was sighted in NEL. One of the three sightings was made on primary lines during on-effort search, and the sighting was not associated with operating fishing vessel.

None of the sightings was made in the vicinity of the TM-CLKL Northern Connection Sub-sea Tunnel Section. The distribution of dolphin sightings during the reporting month is shown in *Figure 2.4*.

Encounter rates of Chinese White Dolphins are deduced from the survey effort and on-effort sighting data made under favourable conditions (Beaufort 3 or below with good visibility) in April 2015 with the results present in *Tables 2.9* and *2.10*.

**Table 2.9** *Individual Survey Event Encounter Rates*

		Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)	Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)
		Primary Lines Only	Primary Lines Only
NEL	Set 1: April 8 <sup>th</sup> /10 <sup>th</sup>	0.0	0.0
	Set 2: April 17 <sup>th</sup> /22 <sup>nd</sup>	0.0	0.0
NWL	Set 1: April 8 <sup>th</sup> /10 <sup>th</sup>	1.4	4.2
	Set 2: April 17 <sup>th</sup> /22 <sup>nd</sup>	0.0	0.0

Note: Dolphin Encounter Rates are deduced from the Two Sets of Surveys (Two Surveys in Each Set) in April 2015 in Northeast (NEL) and Northwest Lantau (NWL)

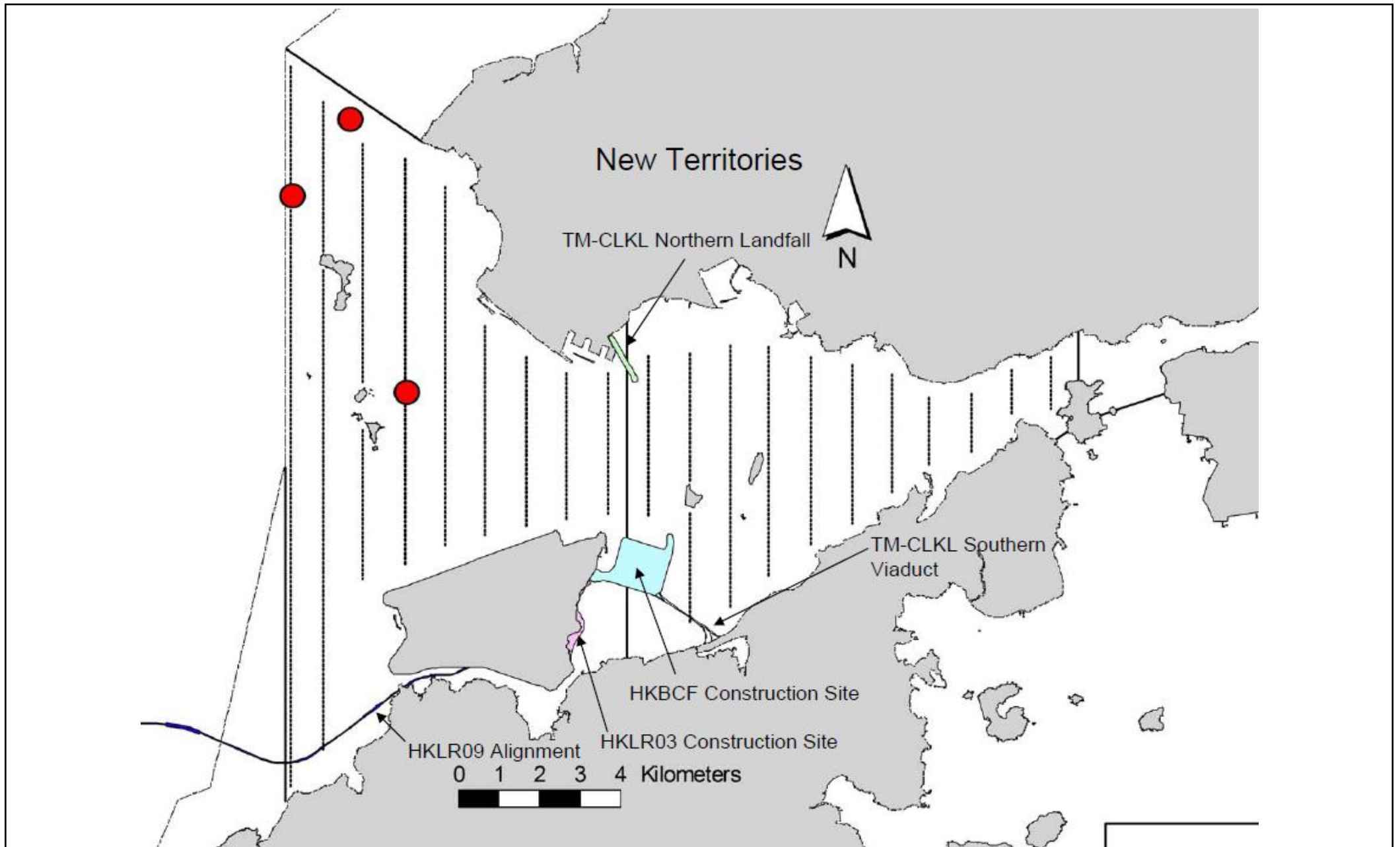


Figure 2.4

HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section  
 The distribution of dolphin sightings during the reporting period  
 (Source: Adopted from HKLR03 Monitoring Survey in April 2015)



**Table 2.10 Monthly Average Encounter Rates**

	Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)		Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)	
	Primary Lines Only	Both Primary and Secondary Lines	Primary Lines Only	Both Primary and Secondary Lines
<b>Northeast Lantau</b>	0.0	0.0	0.0	0.0
<b>Northwest Lantau</b>	0.7	1.1	2.2	6.3

Note: Overall dolphin encounter rates (sightings per 100 km of survey effort) from all four surveys are conducted in April 2015 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau.

The average group size of Chinese White Dolphins in April 2015 was 4.33 individuals per group. Two of the three dolphin groups were composed of 2-3 animals, while another larger group of 8 dolphins were also sighted during the monitoring period.

Due to monthly variation in dolphin occurrence within the survey area, it would be more appropriate to draw conclusion on whether any unacceptable impacts on dolphins have been detected in relation to the construction activities of this Project in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

### 2.3.8 *Implementation of Marine Mammal Exclusion Zone*

There was no dredging, reclamation or marine sheet piling works in open waters during this reporting period. Thus, Passive Acoustic Monitoring (PAM) and the day-time monitoring of Dolphin Exclusion Zone (DEZ) by dolphin observers were not in effect during the reporting period.

## 2.4 EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting month, five (5) site inspections were carried out on 1, 9, 15, 22 and 29 April 2015.

Key observations and recommendations during the site inspections in this reporting period are summarized in *Table 2.11*.

**Table 2.11** *Specific Observations and Recommendations during the Weekly Site Inspection in this Reporting Month*

Inspection Date	Observations	Recommendations/ Remarks
1 April 2015	Works Area - Portion N-A <ul style="list-style-type: none"> <li>Used cement bags should be removed.</li> </ul>	Works Area - Portion N-A <ul style="list-style-type: none"> <li>The Contactor was reminded to cover or remove the used cement bags.</li> </ul>
9 April 2015	Works Area - Portion N-A <ul style="list-style-type: none"> <li>Chemical containers were observed without drip trays and chemical labels.</li> </ul>	Works Area - Portion N-A <ul style="list-style-type: none"> <li>The Contactor was reminded to provide drip trays and chemical labels for the chemical containers.</li> </ul>
15 April 2015	Works Area - Portion N-C <ul style="list-style-type: none"> <li>Accumulated general refuse was observed on the ground.</li> <li>Cement bags should be covered.</li> <li>Sufficient silt removal facilities should be provided and the deposited silt should be removed regularly.</li> </ul>	Works Area - Portion N-C <ul style="list-style-type: none"> <li>The Contractor was reminded to provide sufficient trays for the general refuse.</li> <li>The Contractor was reminded to cover the cement bags.</li> <li>The Contractor was reminded to provide sufficient silt removal facilities and clear the deposited silt.</li> </ul>
22 April 2015	Works Area - Portion N-C <ul style="list-style-type: none"> <li>Accumulated general refuse should be cleared and chemical containers should be stored in drip tray.</li> <li>Enclosure should be provided to the cement mixer.</li> </ul>	Works Area - Portion N-C <ul style="list-style-type: none"> <li>The Contractor was reminded to clear the accumulated general refuse and provide drip tray for the chemical containers.</li> <li>The Contractor was reminded to provide enclosure to the cement mixer.</li> </ul>
29 April 2015	Works Area - Portion N-B <ul style="list-style-type: none"> <li>Water spraying on haul road should be applied more frequently during dry conditions.</li> </ul>	Works Area - Portion N-B <ul style="list-style-type: none"> <li>The Contractor was reminded to apply water spraying on haul road more frequently during dry conditions.</li> </ul>

The Contractor has rectified all of the observations as identified during environmental site inspections in the reporting month.

## 2.5 WASTE MANAGEMENT STATUS

The Contractor had submitted application form for registration as chemical waste producer under the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.

Wastes generated during this reporting period include mainly construction wastes (inert and non-inert). Reference has been made to the waste flow

table prepared by the Contractor (*Appendix M*). The quantities of different types of wastes are summarized in *Table 2.12*.

**Table 2.12** *Quantities of Different Waste Generated in the Reporting Month*

Month/Year	Inert Construction Waste <sup>(a)</sup> (tonnes)	Imported Fill (tonnes)	Inert Construction Waste Re-used (tonnes)	Non-inert Construction Waste <sup>(b)</sup> (tonnes)	Recyclable Materials <sup>(c)</sup> (kg)	Chemical Wastes (kg)	Marine Sediment (m <sup>3</sup> )	
							Category L	Category M (M <sub>p</sub> & M <sub>f</sub> )
April 2015	15,553	0	0	91	0	0	0	0

**Notes:**

- (a) Inert construction wastes include hard rock and large broken concrete, and materials disposed as public fill.
- (b) Non-inert construction wastes include general refuse disposed at landfill.
- (c) Recyclable materials include metals, paper, cardboard, plastics, timber and others.

The Contractor was advised to properly maintain on site C&D materials and waste collection, sorting and recording system, dispose of C&D materials and wastes at designated ground and maximize reuse/ recycle of C&D materials and wastes. The Contractor was also reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

For chemical waste containers, the Contractor was reminded to treat properly and store temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

## 2.6 ENVIRONMENTAL LICENSES AND PERMITS

The status of environmental licensing and permit is summarized in *Table 2.13* below.

**Table 2.13 Summary of Environmental Licensing and Permit Status**

License/Permit	License or Permit No.	Date of Issue	Date of Expiry	License/Permit Holder	Remarks
Environmental Permit	EP-354/2009/D	13 March 2015	Throughout the Contract	HyD	Application for VEP on 3 March 2015 to supersede EP-354/2009/C
Construction Dust Notification	363510	19 August 2013	Throughout the Contract	DBJV	-
Chemical Waste Registration	5213-422-D2516-01	10 September 2013	Throughout the Contract	DBJV	-
Construction Waste Disposal Account	7018108	28 August 2013	Throughout the Contract	DBJV	Waste disposal in Contract No. HY/2012/08
Waste Water Discharge License	WT00017707-2013	18 November 2013	30 November 2018	DBJV	For site WA18
Waste Water Discharge License	WT00019248-2014	5 June 2014	30 June 2019	DBJV	For site Portion N6 and Reclamation Area E
Construction Noise Permit	GW-RW0847-14	11 November 2014	10 May 2015	DBJV	For site WA23
Construction Noise Permit	GW-RW0140-15	29 March 2015	28 September 2015	DBJV	For Portion N6
Construction Noise Permit	GW-RW0123-15	20 March 2015	19 May 2015	DBJV	For Dredging and Reclamation Works
Construction Noise Permit	GW-RW0150-15	1 April 2015	30 September 2015	DBJV	For GI Works at Southern Landfall

**Notes:**

HyD = Highways Department

DBJV = Dragages - Bouygues Joint Venture

VEP = Variation of Environmental Permit

## 2.7 *IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES*

In response to the site audit findings, the Contractors carried out all corrective actions.

A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in *Appendix C*. The necessary mitigation measures relevant to this Contract were implemented properly.

## 2.8 *SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT*

No Action Level or Limit Level exceedances were recorded in the air quality monitoring of this reporting month.

No Action Level or Limit Level exceedances were recorded in the water quality monitoring of this reporting month.

Cumulative statistics are provided in *Appendix L*.

## 2.9 *SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS*

The Environmental Complaint Handling Procedure is provided in *Figure 2.5*.

No environmental complaint was received in the reporting period.

No notification of summons and prosecution were received in the reporting period.

Statistics on complaints, notifications of summons and successful prosecutions are summarized in *Appendix L*.

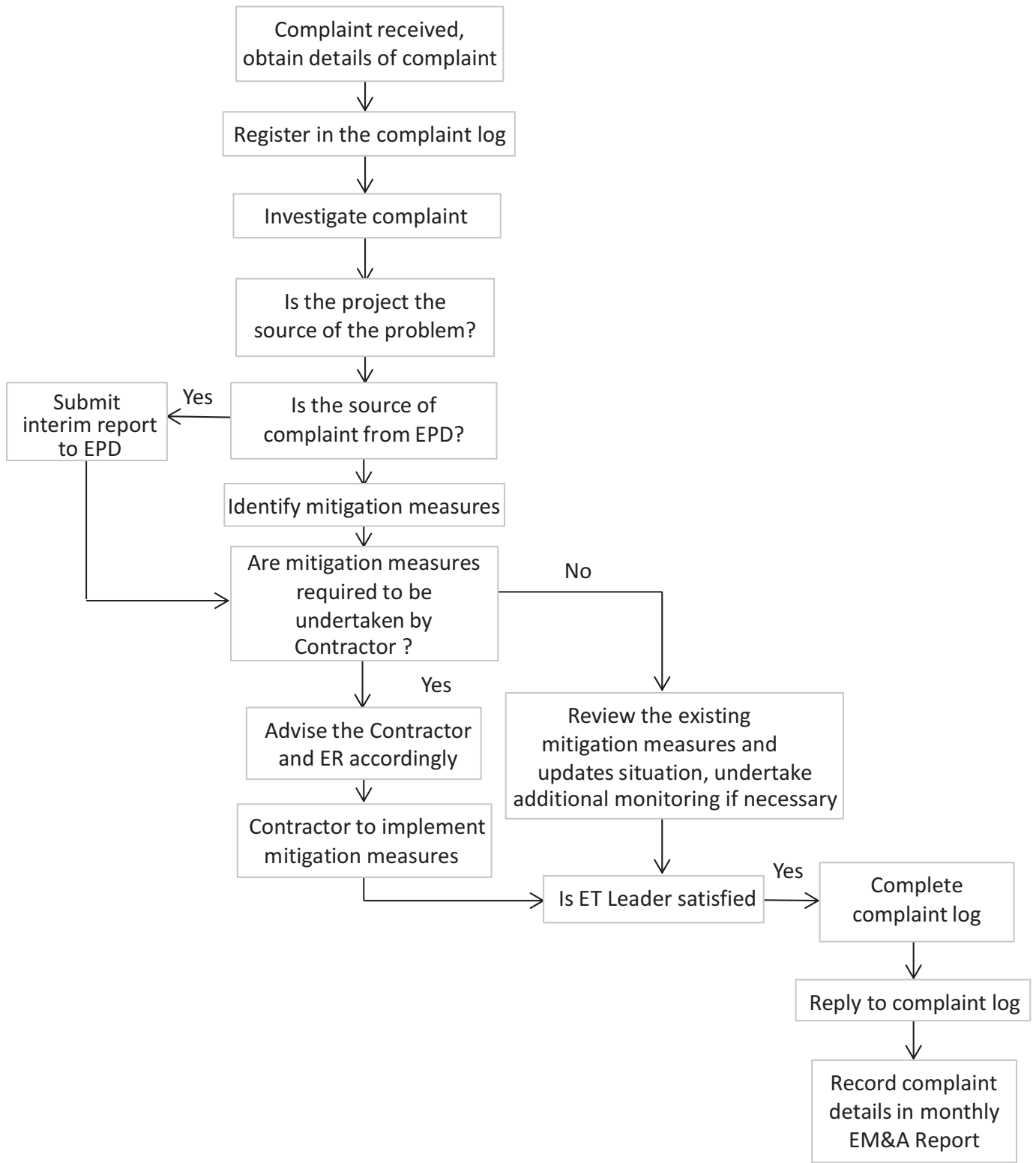


Figure 2.5

Environmental Complaint Handling Procedure

### 3 FUTURE KEY ISSUES

#### 3.1 CONSTRUCTION ACTIVITIES FOR THE COMING MONTH

As informed by the Contractor, the major works for the Project in May 2015 are summarized in *Table 3.1*.

*Table 3.1 Construction Works to Be Undertaken in the Coming Month*

<b>Works to be undertaken</b>
<i>Land-based Works</i>
<ul style="list-style-type: none"><li>• Excavation for Ventilation Shaft at Works Area – Portion N-C;</li><li>• Surcharge Set Up at Works Area – Portion N-C;</li><li>• Land-based Sheet Piling Works at Works Area – Portion N-A;</li><li>• Diaphragm Wall Construction for Ventilation Shaft at Works Area – Portion N-C;</li><li>• TBM Platform Construction at Works Area – Portion N-A;</li><li>• Delivery &amp; Assembly of TBM at Works Area – Portion N-A and,</li><li>• Set up of Slurry Treatment Plant at Works Area – Portion N-C.</li></ul>

#### 3.2 KEY ISSUES FOR THE COMING MONTH

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of May 2015 are mainly associated with dust, marine water quality, marine ecology and waste management issues.

#### 3.3 MONITORING SCHEDULE FOR THE COMING MONTH

The tentative schedule for environmental monitoring in May 2015 is provided in *Appendix F*.

*4.1 CONCLUSIONS*

This Eighteenth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 30 April 2015, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/D.

Air quality (including 1-hour TSP and 24-hour TSP), water quality and dolphin monitoring were carried out in this reporting month. No Action Level or Limit Level exceedances were recorded in the water quality monitoring of this reporting month. No Action Level or Limit Level exceedances were recorded in the air quality monitoring of this reporting month.

A total of three (3) groups of thirteen (13) Chinese White Dolphin sightings were recorded during the two sets of surveys in April 2015. All sightings were made in NWL during the two sets of surveys in April 2015, while no dolphin was sighted in NEL. One of the three sightings was made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel. No unacceptable impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations during the dolphin monitoring in this reporting month.

Environmental site inspection was carried out five (5) times in April 2015. Recommendations on remedial actions recommended for the deficiencies identified during the site audits were properly implemented by the Contractor.

No non-compliance event was recorded during the reporting period.

No environmental complaint was received during the reporting period.

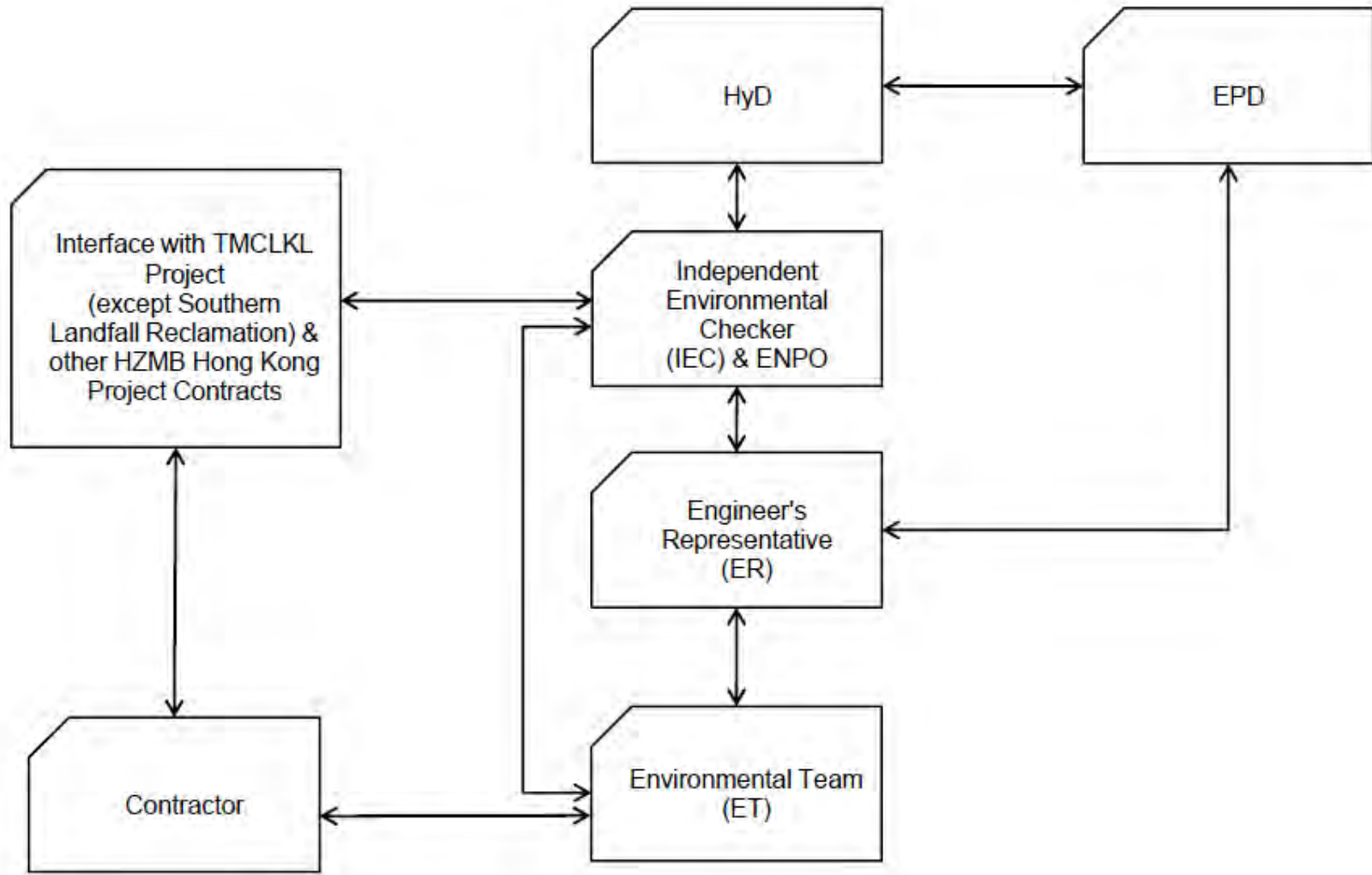
No summons/ prosecution was received during the reporting period.

The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.



Appendix A

## Project Organization for Environmental Works



↔ Line of Communication

Appendix B

## Construction Programme

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	2014									
							Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
<b>TMCLK - Northern Connection Sub-Sea Tunnel Section</b>																
<b>General Submissions</b>																
<b>General Design Submissions</b>																
<b>(A19) DDA for Roadworks &amp; Project Alignment</b>																
DD68350	ICE Approval & Issue Check Cert	12	18-Sep-14	03-Oct-14	03-Sep-14A	04-Feb-15A										
DD68360	Submit ICE Check Cert to SO	6	04-Oct-14	10-Oct-14	05-Feb-15A	10-Feb-15A										
DD68370	SO's Review	35	18-Sep-14	22-Oct-14	22-Dec-14A	22-Jun-15										
<b>(G6) IFA for Tunnel GBP</b>																
DD70750	SO's Review	35	29-Apr-14	02-Jun-14	09-Aug-14A	31-Mar-15										
DD70760	SO Approval with Condition Received	0		03-Jun-14		31-Mar-15										
<b>Construction Supervision Plan</b>																
GEO1115	2nd GEO Review	28	29-Mar-14	25-Apr-14	01-Feb-14A	01-Apr-15										
<b>PAYMENT MILESTONE</b>																
<b>Design and Design Checking of the Works</b>																
PM1115	MS 2.9 Submit AIP for ground treatment at Southern Landfall	0		29-Oct-14		30-Mar-15										
PM1120	MS 2.10 Approve AIP for ground treatment at Southern Landfall by the Supervising Officer	0		22-Jan-15		06-May-15										
PM1125	MS 2.11 Submit DDA for ground treatment at Southern Landfall	0		26-May-15		27-Jun-15										
PM1135	MS 2.13 Submit Risk Assessment of CLPP submarine cables - Tunnelling Works	0		12-Jan-15		30-Mar-15										
PM116520	MS 2.19.3 Submit DDA for Cross Passages	0		20-Dec-14		01-Jun-15										
PM117010	MS 2.20.2 Approve DDA for TBM Sub-sea Tunnel - Internal Structure by the Supervising Officer	0		22-Dec-14		05-May-15										
PM1180	MS 2.22 Approve AIP for Cut-and-cover Tunnel and Cross Passages at Southern Landfall by the Supervising Officer	0		17-Nov-14		01-Apr-15										
PM1185	MS 2.23 Submit DDA for Cut-and-cover Tunnel and Cross Passages at Southern Landfall	0		13-Jan-15		01-Jun-15										
PM1210	MS 2.28 Approve DDA for Cut-and-cover Tunnel and Cross Passages at Northern Landfall by the Supervising Officer	0		12-Feb-15		27-Apr-15										
PM1220	MS 2.30 Approve AIP for Approach Ramp Structures to Cut-and-cover Tunnels by the Supervising Officer	0		17-Nov-14		01-Apr-15										
PM1225	MS 2.31 Submit DDA for Approach Ramp Structures to Cut-and-cover Tunnels	0		13-Jan-15		01-Jun-15										
PM1265	MS 2.39 Submit DDA for At grade Roads at Northern Landfall	0		25-Jul-14		06-Mar-15A										
PM1305	MS 2.47 Submit DDA for North Ventilation Building	0		31-Oct-14		15-May-15										
PM1325	MS 2.51 Submit DDA for Facilities Provision for TCSS	0		19-Nov-14		10-Jun-15										
PM1345	MS 2.55 Submit DDA for Drainage, Sewerage, Waterworks and Utilities at Southern Landfall	0		03-Jan-15		30-Mar-15										
PM1350	MS 2.56 Approve DDA for Drainage, Sewerage, Waterworks and Utilities at Southern Landfall by the Supervising Officer	0		08-Apr-15		25-Jun-15										
PM1370	MS 2.60 Approve DDA for Drainage, Sewerage, Waterworks and Utilities at Northern Landfall by the Supervising Officer	0		12-Dec-14		18-Apr-15										
PM1405	MS 2.67 Submit DDA for TBM North Approach - Tunnel Internal Structure	0		21-Jun-14		30-Mar-15										
PM1410	MS 2.68 Approve DDA for TBM North Approach - Tunnel Internal Structure by the Supervising Officer	0		17-Sep-14		02-May-15										
<b>Tunnel Boring Machine (TBM) and Back-up Equipment for TBM Tunnel</b>																
PM1450	MS 3.1.3 Delivery to Site of cutter head of TBM for Southbound Tunnel	0		18-Feb-15		06-Mar-15A										
PM1455	MS 3.1.4 Delivery to Site of remaining parts of TBM and back-up equipment for Southbound Tunnel	0		30-Mar-15		06-Mar-15A										
PM1480	MS 3.1.8 Delivery to Site of cutter head of TBM for Northbound Tunnel	0		02-Sep-15		08-Jan-15A										
PM1510	MS 3.1.14 Delivery to Site of hyperbaric intervention equipments and facilities, including but not limited to equipment	0		04-May-15		02-Jun-15										
PM1530	MS 3.1.18 Delivery to Site of hyperbaric intervention equipments and facilities, including but not limited to equipment	0		04-May-15		02-Jun-15										
PM1555	MS 3.1.23 Complete site assembly, testing and commissioning of Slurry Treatment Plant	0		05-Mar-15		27-Apr-15										
<b>Cut-and-cover Tunnel at Northern Landfall</b>																
PM2445	MS 4.2.3 Delivery to Site of cutter head of TBM for Northbound Northern Landfall TBM Tunnel	0		12-Dec-14		08-Jan-15A										
PM2450	MS 4.2.4 Delivery to Site of remaining parts of TBM and back-up equipment for Northbound Northern Landfall TBM Tunnel	0		19-Jan-15		08-Apr-15										
PM2455	MS 4.2.5 Complete site assembly, testing and commissioning of TBM for Northbound Northern Landfall TBM Tunnel	0		05-Mar-15		18-May-15										
PM2465	MS 4.2.7 Complete walls of launching shaft	0		02-Sep-14		06-Mar-15A										
PM2470	MS 4.2.8 Complete excavation to formation level for launching shaft and complete casting of base slab	0		29-Jan-15		08-Jan-15A										
PM2475	MS 4.2.9 Complete all necessary works of launching shaft to facilitate launching of TBM	0		05-Feb-15		06-Mar-15A										
PM2490	MS 4.2.12 Complete 75% of ground treatment for excavation of all Northern Landfall TBM Tunnels	0		10-Sep-14		08-Jan-15A										
PM2495	MS 4.2.13 Complete 100% of ground treatment for excavation of all Northern Landfall TBM Tunnels	0		30-Apr-15		07-May-15										
<b>Temporary Pontoon</b>																
PM3090	MS 6A.2 Provide the operation and maintenance services for the Temporary Pontoon in accordance with the Contract.	1433	03-Dec-13	25-Oct-18	08-Feb-14A	24-Oct-18										
<b>Construction</b>																
<b>Northern Landfall</b>																
<b>North Reclamation (Phase 1)</b>																
<b>Design Submission</b>																
<b>(B4) DDA Construction Risk Assessment - Impact on North Landfall</b>																
DD68410	SO's Comments for 1st Submission	35	01-Jun-14	05-Jul-14	27-Sep-14A	02-Jan-15A										
DD68420	Prepare Re-submission	10	07-Jul-14	17-Jul-14	02-Jan-15A	02-Jan-15A										
DD68430	2nd Submission	0		17-Jul-14		02-Jan-15A										
DD68490	SO's Condition Approval	35	18-Jul-14	21-Aug-14	02-Jan-15A	02-Jan-15A										
<b>(B4) DDA Construction Risk Assessment - Impact on Sub-sea Tunnel</b>																
DD71405	SO's Comments for 1st Submission	35	21-Sep-14	25-Oct-14	27-Sep-14A	02-Jan-15A										
DD71415	Prepare Re-submission	10	27-Oct-14	06-Nov-14	02-Jan-15A	02-Jan-15A										
DD71420	2nd Submission	0		06-Nov-14		02-Jan-15A										
DD71435	SO's Condition Approval	35	07-Nov-14	11-Dec-14	02-Jan-15A	02-Jan-15A										
<b>Construction</b>																
<b>Milestones</b>																
NRC13240	Completion of Zone A1 Reclamation up to +10mPD	0		21-Oct-14		30-Mar-15										
NRC13250	Completion of Zone A2 Reclamation up to +10mPD	0		10-Nov-14		30-Dec-14A										
<b>Zone D1</b>																
<b>Vertical Seawall</b>																
NRC11720	VS - Mass Concrete Coping - Zone D1 - (CH205 to 255)	15	18-Jun-14	05-Jul-14	22-Dec-14A	23-Jan-15A										
NRC11790	VS - Mass Concrete Coping - Zone D1 - (CH255 to 305)	8	07-Jul-14	15-Jul-14	14-Jan-15A	11-Feb-15A										
NRC11860	VS - Mass Concrete Coping - Zone D1 - (CH305 to 355)	8	16-Jul-14	24-Jul-14	05-Mar-15A	10-Mar-15A										
<b>Sloping Seawall</b>																

■ Planned Bar  
■ Planned Bar - Critical  
◆ Planned Milestone  
■ Progress bar  
◆ Progress Milestone

**TMCLK - Northern Connection Sub-Sea Tunnel Section**  
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 Progress as of 30-Mar-15



Date	Revision	Checked	Approved
21-Feb-14	TMCLKDUBJEN.PRG.08505	SPa	WYu
28-Aug-14	TMCLKDUBJEN.PRG.08505 Rev.C	CLa	WYu



Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	2015								
							Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
A6416400	F - Backfilling to +6.0mPD to Existing Seawall - CH184 to CH231	1	21-Mar-14	21-Mar-14	10-Apr-15	10-Apr-15									
<b>CH231 to CH278</b>															
A6416273	F - Backfilling up to +0.5mPD & T3 Installation - CH231 to CH278	6	28-Mar-14	02-Apr-14	10-Nov-14A	12-Mar-15A									
A6416278	F - Backfilling up to +3.0mPD - CH231 to CH278	2	03-Apr-14	04-Apr-14	12-Apr-15	13-Apr-15									
A6416280	F - Backfilling up to +6.0mPD - CH231 to CH278	2	05-Apr-14	06-Apr-14	14-Apr-15	15-Apr-15									
A6416310	F - Anchor wall Installation - CH231 to CH278	4	07-Apr-14	10-Apr-14	16-Apr-15	20-Apr-15									
A6416480	F - Backfilling up to 0.0mPD & G2 Installation to Anchor Wall - CH231 to CH278	3	11-Apr-14	13-Apr-14	21-Apr-15	23-Apr-15									
A6416490	F - Backfilling up to +3.0mPD & G1 Installation to Anchor Wall - CH231 to CH278	2	14-Apr-14	15-Apr-14	24-Apr-15	25-Apr-15									
A6416500	F - Backfilling up to +6.0mPD to Anchor Wall - CH231 to CH278	2	16-Apr-14	17-Apr-14	26-Apr-15	27-Apr-15									
A6416510	F - Backfilling to +6.0mPD to Existing Seawall - CH231 to CH278	1	18-Apr-14	18-Apr-14	28-Apr-15	28-Apr-15									
<b>CH278 to CH327</b>															
A6416210	F - Backfilling up to +0.5mPD - CH278 to CH327	4	23-Mar-14	26-Mar-14	02-Apr-15	05-Apr-15									
A6416215	F - Backfilling up to +3.0mPD & T4 Installation - CH278 to CH327	5	27-Mar-14	31-Mar-14	07-Apr-15	11-Apr-15									
A6416220	F - Backfilling up to +6.0mPD - CH278 to CH327	2	01-Apr-14	02-Apr-14	12-Apr-15	13-Apr-15									
A6416340	F - Anchor wall Installation - CH278 to CH327	4	11-Apr-14	15-Apr-14	21-Apr-15	24-Apr-15									
A6416520	F - Backfilling up to 0.0mPD & G2 Installation to Anchor Wall - CH278 to CH327	3	16-Apr-14	18-Apr-14	25-Apr-15	27-Apr-15									
A6416530	F - Backfilling up to +3.0mPD & G1 Installation to Anchor Wall - CH278 to CH327	3	19-Apr-14	21-Apr-14	28-Apr-15	30-Apr-15									
A6416540	F - Backfilling up to +6.0mPD to Anchor Wall - CH278 to CH327	3	22-Apr-14	24-Apr-14	01-May-15	03-May-15									
A6416550	F - Backfilling to +6.0mPD to Existing Seawall - CH278 to CH327	1	25-Apr-14	25-Apr-14	04-May-15	04-May-15									
<b>CH327 to CH381</b>															
A6416155	F - Backfilling up to +0.5mPD - CH327 to CH381	3	16-Mar-14	18-Mar-14	30-Mar-15	01-Apr-15									
A6416160	F - Backfilling up to +3.0mPD & T4 Installation - CH327 to CH381	5	19-Mar-14	23-Mar-14	02-Apr-15	06-Apr-15									
A6416170	F - Backfilling up to +6.0mPD - CH327 to CH381	3	24-Mar-14	26-Mar-14	07-Apr-15	09-Apr-15									
A6416370	F - Anchor wall Installation - CH327 to CH381	3	16-Apr-14	22-Apr-14	25-Apr-15	28-Apr-15									
A6416560	F - Backfilling up to 0.0mPD & G2 Installation to Anchor Wall - CH327 to CH381	3	23-Apr-14	25-Apr-14	29-Apr-15	01-May-15									
A6416570	F - Backfilling up to +3.0mPD & G1 Installation to Anchor Wall - CH327 to CH381	3	26-Apr-14	28-Apr-14	02-May-15	04-May-15									
A6416580	F - Backfilling up to +6.0mPD to Anchor Wall - CH327 to CH381	2	29-Apr-14	30-Apr-14	05-May-15	06-May-15									
A6416590	F - Backfilling to +6.0mPD to Existing Seawall - CH327 to CH381	1	01-May-14	01-May-14	07-May-15	07-May-15									
<b>Box Culvert Extension</b>															
<b>Construction</b>															
<b>CH000 to CH137</b>															
A6416670	Bored Pile Construction - A43 to A62 (4 Rigs) & Land Sheet Piling - Summary	96	31-May-14	23-Sep-14	21-Jul-14A	06-Mar-15A									
A6416675	Land Sheet Pile Installation	77	24-Jun-14	23-Sep-14	10-Nov-14A	06-Mar-15A									
A6416680	Backfilling for Surcharge	18	24-Sep-14	16-Oct-14	30-Mar-15	23-Apr-15									
A6416690	Surcharge Period	180	17-Oct-14	14-Apr-15	24-Apr-15	20-Oct-15									
<b>CH137 to CH184</b>															
A6416770	Backfilling for Surcharge	12	20-Sep-14	06-Oct-14	30-Mar-15	16-Apr-15									
A6416780	Surcharge Period	180	07-Oct-14	04-Apr-15	17-Apr-15	13-Oct-15									
<b>CH184 to CH231</b>															
A6416620	Predrilling - CH184 to CH231	24	22-Mar-14	23-Apr-14	08-Nov-14A	29-Apr-15									
A6416730	Bored Pile Construction - A34 to A27 - Summary	156	22-Mar-14	30-Sep-14	30-Oct-14A	29-Aug-15									
A6416950	Bored Pile Construction - A34 to A27 - 4 out of 8 piles	39	14-May-14	28-Jun-14	30-Oct-14A	15-May-15									
A6416960	Bored Pile Construction - A34 to A27 - 6 out of 8 piles	39	30-Jun-14	14-Aug-14	16-May-15	03-Jul-15									
<b>CH231 to CH278</b>															
A6416630	Predrilling - CH231 to CH278	24	22-Apr-14	21-May-14	29-Apr-15	28-May-15									
A6416740	Bored Pile Construction - A26 to A19 - Summary	143	22-Apr-14	13-Oct-14	29-Apr-15	19-Oct-15									
A6417470	Bored Pile Construction - A26 to A19 - 2 out of 8 piles	36	22-Apr-14	05-Jun-14	29-Apr-15	11-Jun-15									
A6417500	Bored Pile Construction - A26 to A19 - 4 out of 8 piles	36	06-Jun-14	18-Jul-14	12-Jun-15	25-Jul-15									
<b>CH278 to CH327</b>															
A6416640	Predrilling - CH278 to CH327	24	26-Apr-14	26-May-14	05-May-15	02-Jun-15									
A6416750	Bored Pile Construction - A18 to A11 - Summary	117	27-May-14	15-Oct-14	03-Jun-15	22-Oct-15									
A6417530	Bored Pile Construction - A18 to A11 - 2 out of 8 piles	30	27-May-14	02-Jul-14	03-Jun-15	09-Jul-15									
<b>CH327 to CH381</b>															
A6416650	Predrilling - CH327 to CH381	24	02-May-14	30-May-14	08-May-15	05-Jun-15									
A6416760	Bored Pile Construction - A10 to A03	86	31-May-14	11-Sep-14	06-Jun-15	16-Sep-15									
A6417570	Bored Pile Construction - A10 to A03 - 2 out of 8 piles	22	31-May-14	26-Jun-14	06-Jun-15	03-Jul-15									
<b>CH381 to CH399 (Box Culvert Connection)</b>															
A6416660	F - Prebored H-piles for CKS Temporary Land Access	6	18-Feb-14	24-Feb-14	16-Mar-15A	20-Mar-15A									
A6417000	F - Steel Bridge Installation for Land Access to Zone E	52	25-Feb-14	30-Apr-14	16-Mar-15A	22-Mar-15A									
A6417010	F - Available of Land Access to Zone E	0	02-May-14		22-Mar-15A										
<b>North Shafts Construction &amp; Tunnel Structure</b>															
<b>Design Submission</b>															
<b>(C1) DDA for North Approach Ramp Permanent Structure</b>															
DD70770	Preparation DDA North Approach Ramp Permanent Structure	18	28-Jun-14	19-Jul-14	02-Jan-15A	13-Jan-15A									
DD70780	Review & Comment by JV	12	21-Jul-14	02-Aug-14	13-Jan-15A	02-Apr-15									
DD70785	Designer prepare DDA	6	04-Aug-14	09-Aug-14	08-Apr-15	14-Apr-15									
DD70790	Formal Submission of DDA to ICE/ IPs	0		09-Aug-14		14-Apr-15									
DD70792	Advanced Submission to SO	0		09-Aug-14		14-Apr-15									
DD70794	IPs/SO's Advance comments / ICE comments	28	10-Aug-14	06-Sep-14	15-Apr-15	12-May-15									
DD70800	IPs/ SO's Advance Comments/ ICE Comments	28	07-Sep-14	04-Oct-14	13-May-15	09-Jun-15									
DD70805	Comments Received	0		04-Oct-14		09-Jun-15									
DD70810	Designer to Reply RIC + Update Submission	15	06-Oct-14	22-Oct-14	10-Jun-15	27-Jun-15									
DD70820	Submit Updated DDA to SO/ ICE/ IPs	0	23-Oct-14		29-Jun-15										
DD70830	ICE Approval & Issue Check Cert	18	23-Oct-14	12-Nov-14	29-Jun-15	20-Jul-15									
DD70850	IPs Review	28	23-Oct-14	19-Nov-14	29-Jun-15	26-Jul-15									

■ Planned Bar  
■ Planned Bar - Critical  
◆ Planned Milestone  
■ Progress bar  
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Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	2014											
							Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	2015	2015	2015
DD70870	SO's Review	35	23-Oct-14	26-Nov-14	29-Jun-15	02-Aug-15	SO's Review											
<b>Construction</b>																		
<b>North Launching Shaft Base Slab for TBM Launching</b>																		
NSH1455	E - Tympanum construction for TBM break-in	12	20-Nov-14	03-Dec-14	29-Jan-15A	02-Apr-15	E - Tympanum construction for TBM break-in											
NSH1460	E - Cell 1 to 2 - Base Slab construction	22	13-Nov-14	08-Dec-14	01-Dec-14A	22-Jan-15A	E - Cell 1 to 2 - Base Slab construction											
<b>North Ventilation Shaft ELS Foundation &amp; Capping Beam</b>																		
A6415780	B - Diaphragm Wall - Shaft ELS	81	26-Aug-14	01-Dec-14	24-Nov-14A	28-Mar-15A	B - Diaphragm Wall - Shaft ELS											
A6415790	B - Instrumentation & Pump well Installation	6	02-Dec-14	08-Dec-14	06-Mar-15A	02-Apr-15	B - Instrumentation & Pump well Installation											
A6415795	B - Pumping Test for Excavation	7	09-Dec-14	15-Dec-14	03-Apr-15	09-Apr-15	B - Pumping Test for Excavation											
<b>North Ventilation Shaft Excavation &amp; Base Slab</b>																		
A6415800	B - Vent Shaft Excavation (+6.0 to +4.0mPD) - Reclaimed Fill	5	02-Dec-14	06-Dec-14	30-Mar-15	08-Apr-15	B - Vent Shaft Excavation (+6.0 to +4.0mPD) - Reclaimed Fill											
A6415810	B - Capping Beam Installation (+6.0mPD)	12	08-Dec-14	20-Dec-14	09-Apr-15	22-Apr-15	B - Capping Beam Installation (+6.0mPD)											
A6415820	B - Vent Shaft Excavation (+4.0 to -8.0mPD) - Reclaimed Fill	19	22-Dec-14	15-Jan-15	23-Apr-15	15-May-15	B - Vent Shaft Excavation (+4.0 to -8.0mPD) - Reclaimed Fill											
A6415830	B - Ring Beam Installation (-5.5mPD)	6	16-Jan-15	22-Jan-15	16-May-15	22-May-15	B - Ring Beam Installation (-5.5mPD)											
A6415840	B - Vent Shaft Excavation (-8.0 to -20.0mPD) - Fill/MD/ALLUVIUM	27	23-Jan-15	02-Mar-15	23-May-15	25-Jun-15	B - Vent Shaft Excavation (-8.0 to -20.0mPD) - Fill/MD/ALLUVIUM											
A6415850	B - Ring Beam Installation (-18.0mPD)	6	03-Mar-15	09-Mar-15	26-Jun-15	03-Jul-15	B - Ring Beam Installation (-18.0mPD)											
<b>CLP Temporary Substation</b>																		
<b>Construction</b>																		
DDP12800	1st Batch - CLP Installation & Commissioning	108	02-Jul-14	07-Nov-14	02-Jul-14A	10-Jan-15A	1st Batch - CLP Installation & Commissioning											
DDP12860	1st Batch - Commissioning & Energization	0		28-Nov-14		10-Jan-15A	1st Batch - Commissioning & Energization											
DDP12870	2nd Batch - CLP Installation & Commissioning	95	15-Oct-14	05-Feb-15	02-Jul-14A	10-Jan-15A	2nd Batch - CLP Installation & Commissioning											
DDP12900	Final FS Installation by JV	6	06-Feb-15	12-Feb-15	10-Jan-15A	10-Jan-15A	Final FS Installation by JV											
DDP12910	FSD inspection for 2nd Transformer Energization	6	13-Feb-15	18-Feb-15	10-Jan-15A	10-Jan-15A	FSD inspection for 2nd Transformer Energization											
DDP12920	2nd Batch - Commissioning & Energization	0		18-Feb-15		10-Jan-15A	2nd Batch - Commissioning & Energization											
<b>North Surface works for TBM Tunnelling</b>																		
<b>Design Submission</b>																		
<b>(D1) IFA for Temp. Access to Portion N8A, N8B &amp; N8C incl. Temp. Lighting</b>																		
AP01500	Preparation of AIP Temporary Access Road to N8	33	02-Jan-14	15-Feb-14	02-Jan-14A	13-Mar-15A	Preparation of AIP Temporary Access Road to N8											
AP01505	Review & Comment by JV	12	17-Feb-14	01-Mar-14	13-Mar-15A	18-Mar-15A	Review & Comment by JV											
AP01510	Designer Prepare IFA	6	03-Mar-14	08-Mar-14	18-Mar-15A	20-Mar-15A	Designer Prepare IFA											
AP01515	Formal Submission of IFA to ICE/IPs	0		08-Mar-14		20-Mar-15A	Formal Submission of IFA to ICE/IPs											
AP01520	Advanced Submission of IFA to SO	0		08-Mar-14		20-Mar-15A	Advanced Submission of IFA to SO											
AP01525	Review & Comment by SO/ ICE/ IPs	28	09-Mar-14	05-Apr-14	20-Mar-14A	20-Apr-15	Review & Comment by SO/ ICE/ IPs											
AP01530	Advance Comments from SO/ Comments from ICE/ IPs Received	0		07-Apr-14		20-Apr-15	Advance Comments from SO/ Comments from ICE/ IPs Received											
AP01535	Designer to Prepare Rtc & Updated AIP	18	07-Apr-14	30-Apr-14	21-Apr-15	12-May-15	Designer to Prepare Rtc & Updated AIP											
AP01540	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)	0		30-Apr-14		12-May-15	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)											
AP01545	Reply to IPs Comments in RTC	0		30-Apr-14		12-May-15	Reply to IPs Comments in RTC											
AP01550	ICE Approval & Issue of Design Check Cert.	18	02-May-14	23-May-14	13-May-15	03-Jun-15	ICE Approval & Issue of Design Check Cert.											
AP01555	Check Cert to SO	0		23-May-14		03-Jun-15	Check Cert to SO											
AP01560	No Objection or Further Minor Comments from IPs Received	0		23-May-14		03-Jun-15	No Objection or Further Minor Comments from IPs Received											
AP01565	SO Review (35 Days)	35	02-May-14	05-Jun-14	13-May-15	16-Jun-15	SO Review (35 Days)											
AP01570	SO Approval with Condition Received	0		05-Jun-14		16-Jun-15	SO Approval with Condition Received											
<b>Construction</b>																		
<b>Zone E</b>																		
A6416450	Zone E - Jet grouting for Break-in Plug	60	04-Nov-14	15-Jan-15	03-Sep-14A	09-Mar-15A	Zone E - Jet grouting for Break-in Plug											
<b>Zone D1</b>																		
NRC14020	Zone D1 - B/C Slurry Substitution for CP54	20	14-Jul-14	05-Aug-14	02-Sep-14A	07-Feb-15A	Zone D1 - B/C Slurry Substitution for CP54											
<b>Zone D2</b>																		
NRC14110	Zone D2 - B/C Slurry Substitution for CP53	22	06-Aug-14	30-Aug-14	15-Jan-15A	13-Feb-15A	Zone D2 - B/C Slurry Substitution for CP53											
<b>Zone C1</b>																		
NRC1202130	Zone C1 - B/C Slurry Substitution for CP52	26	27-Aug-14	26-Sep-14	02-Mar-15A	02-Mar-15A	Zone C1 - B/C Slurry Substitution for CP52											
<b>Zone C2</b>																		
NRC1202150	Zone C2 - Drilling for Rock Fissure Grouting for CP51	21	03-Jul-14	26-Jul-14	06-Nov-14A	10-Jan-15A	Zone C2 - Drilling for Rock Fissure Grouting for CP51											
NRC1202155	Zone C2 - Rock Fissure Grouting for CP51	44	14-Jul-14	02-Sep-14	19-Nov-14A	10-Jan-15A	Zone C2 - Rock Fissure Grouting for CP51											
NRC1202160	Zone C2 - Jet Grouting for CP51	18	20-Aug-14	10-Sep-14	10-Jan-15A	10-Jan-15A	Zone C2 - Jet Grouting for CP51											
<b>Zone B</b>																		
A6415895	Zone B - Unreinforced Separation D-wall	13	27-Aug-14	11-Sep-14	11-Feb-15A	31-Mar-15	Zone B - Unreinforced Separation D-wall											
A6415897	Zone B - Unreinforced Separation D-wall	13	25-Jul-14	08-Aug-14	19-Nov-14A	10-Feb-15A	Zone B - Unreinforced Separation D-wall											
A6415900	Zone B - Slurry Wall for TBM Break-out Plug	34	02-Dec-14	13-Jan-15	23-Mar-15A	23-Mar-15A	Zone B - Slurry Wall for TBM Break-out Plug											
A6415910	Zone B - Slurry Wall - Toe Grouting	24	14-Jan-15	10-Feb-15	23-Mar-15A	23-Mar-15A	Zone B - Slurry Wall - Toe Grouting											
A6415920	Zone B - Ground Treatment for TBM Break-out Plug	58	11-Feb-15	30-Apr-15	18-Mar-15A	07-May-15	Zone B - Ground Treatment for TBM Break-out Plug											
<b>Ground Treatment</b>																		
A6417430	Zone A - B/C Slurry Substitution for CP49	30	22-Oct-14	25-Nov-14	30-Mar-15	08-May-15	Zone A - B/C Slurry Substitution for CP49											
A6417440	Zone A - Drilling for Rock Fissure Grouting for CP48	65	11-Nov-14	28-Jan-15	30-Mar-15	19-Jun-15	Zone A - Drilling for Rock Fissure Grouting for CP48											
A6417450	Zone A - Rock Fissure Grouting for CP48	90	25-Nov-14	19-Mar-15	17-Apr-15	04-Aug-15	Zone A - Rock Fissure Grouting for CP48											
A6417460	Zone A - Jet Grouting for CP48	72	29-Jan-15	05-May-15	22-Jun-15	14-Sep-15	Zone A - Jet Grouting for CP48											
<b>North Approach TBM Tunnelling &amp; Cross Passage</b>																		
<b>Major Procurement</b>																		
<b>Precast Segment</b>																		
<b>Precast Segment ID15.60 - Production for NB North TBM Tunnel</b>																		
A6417970	ID15.60 TBM Segment Ring Fabrication - 2 rings per day	148	30-Sep-14	25-Apr-15	25-Sep-14A	18-Jun-15	ID15.60 TBM Segment Ring Fabrication - 2 rings per day											
<b>Design Submission</b>																		
<b>(D7) IFA Gantry Crane Supports/Foundation</b>																		
DD69070	Designer to Reply Rtc + Update Submission	21	07-May-14	30-May-14	04-Dec-14A	08-Jan-15A	Designer to Reply Rtc + Update Submission											
DD69080	Submit Updated IFA to SO/ ICE/ IPs	0		31-May-14		08-Jan-15A	Submit Updated IFA to SO/ ICE/ IPs											
DD69090	ICE Approval & Issue Check Cert	12	31-May-14	14-Jun-14	11-Nov-14A	19-Jan-15A	ICE Approval & Issue Check Cert											

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■ Planned Bar - Critical  
◆ Planned Milestone  
■ Progress bar  
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Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	2014																				
							Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	2015	2016	2017									
<b>S882 TBM Assembly at North TBM Launching Shaft</b>																											
NSH206010	S882 - TBM Launching - Front Shield Assembly	3	13-Feb-15	15-Feb-15	08-Mar-15A	20-Mar-15A																					
NSH206020	S882 - TBM Launching - Cutterhead Assembly	3	16-Feb-15	18-Feb-15	22-Mar-15A	22-Mar-15A																					
NSH206030	S882 - TBM Launching - Erector Assembly	3	22-Feb-15	24-Feb-15	24-Mar-15A	26-Mar-15A																					
NSH206040	S882 - TBM Launching - Tail Skin Assembly	3	25-Feb-15	27-Feb-15	28-Mar-15A	04-May-15																					
NSH2130	S882 - TBM Launching - Main Drive Connection	2	28-Feb-15	01-Mar-15	05-May-15	06-May-15																					
NSH2140	S882 - TBM Launching - Main Drive Shifting	2	02-Mar-15	03-Mar-15	07-May-15	08-May-15																					
NSH2150	S882 - TBM Launching - Main Drive Thrust Frame Installation	14	04-Mar-15	17-Mar-15	09-May-15	23-May-15																					
NSH215010	S882 - TBM Launching - Gantry 2 Assembly	3	04-Mar-15	06-Mar-15	09-May-15	11-May-15																					
NSH215020	S882 - TBM Launching - Gantry 1 Assembly	3	07-Mar-15	09-Mar-15	12-May-15	14-May-15																					
NSH2160	S882 - TBM Launching - Gantry 1 & Main Drive connection	3	18-Mar-15	20-Mar-15	24-May-15	26-May-15																					
NSH2170	S882 - TBM Launching - Gantry 2 & Gantry 1 connection	3	21-Mar-15	23-Mar-15	27-May-15	29-May-15																					
NSH2180	S882 - TBM Launching - Gantry 3 assembly	3	10-Mar-15	12-Mar-15	16-May-15	18-May-15																					
NSH2190	S882 - TBM Launching - Gantry 4 assembly	3	13-Mar-15	15-Mar-15	19-May-15	21-May-15																					
NSH2200	S882 - TBM Launching - Gantry 3 & Gantry 2 connection	3	24-Mar-15	26-Mar-15	30-May-15	01-Jun-15																					
NSH2210	S882 - TBM Launching - Gantry 4 & Gantry 3 connection	3	27-Mar-15	29-Mar-15	02-Jun-15	04-Jun-15																					
NSH2220	S882 - TBM Launching - Testing & Commissioning	24	30-Mar-15	25-Apr-15	05-Jun-15	29-Jun-15																					

North Approach TBM Tunnel - NB ID15.60m - S880						
TBM10010	NB - North TBM Tunnel - CDG+Boulder with Trimix (Ch7175 to 7155 - 20m)	14	06-Mar-15	19-Mar-15	22-Jun-15	06-Jul-15

**North Ventilation Building**

**Design Submission**

**(A10) ACABAS Submissions**

GS01648	Prepare 3rd Submission for ACABAS Approval	24	17-Feb-14	15-Mar-14	19-Feb-14A	30-Jan-15A
GS01650	ACABAS Approval	28	16-Mar-14	12-Apr-14	31-Jan-15A	01-Apr-15

**(A11) Submissions to Design Advisory Panel of ArchSD**

GS01730	Prepare Re-submission	18	19-May-14	09-Jun-14	22-Jul-14A	31-Mar-15
GS01740	ArchSD's comment	30	10-Jun-14	09-Jul-14	01-Apr-15	30-Apr-15

**(I1) DDA for North Vent. Bldgs. GBP & Arch. Submission**

DD01225	IPs/ SO's Advance Comments/ ICE Comments	28	29-Jun-14	26-Jul-14	10-Dec-14A	31-Mar-15
DD01230	Comments Received	0		26-Jul-14		31-Mar-15
DD01235	Designer to Reply RtC + Update Submission	21	28-Jul-14	20-Aug-14	02-Apr-15	30-Apr-15
DD01240	Submit Updated DDA to SO/ ICE/ IPs	0	21-Aug-14		02-May-15	
DD01245	ICE Approval & Issue Check Cert	12	21-Aug-14	03-Sep-14	02-May-15	15-May-15
DD01250	Submit ICE Check Cert to SO	6	04-Sep-14	11-Sep-14	16-May-15	22-May-15
DD01255	IPs Review	28	21-Aug-14	17-Sep-14	02-May-15	29-May-15
DD01260	IPs No Objection Received	0		17-Sep-14		29-May-15
DD01265	SO's Review	35	21-Aug-14	24-Sep-14	02-May-15	05-Jun-15
DD01270	SO Approval with Condition Received	0		24-Sep-14		05-Jun-15

**(I1) DDA for North & South Vent. Bldg. ABWF works**

DD67638	Preparation of DDA North & South ABWF	18	25-Sep-14	17-Oct-14	06-Jun-15	27-Jun-15
DD67648	Review & Comment by JV	24	18-Oct-14	14-Nov-14	29-Jun-15	27-Jul-15

**(I2) DDA for North Vent. Bldgs. Foundation Design**

DD01305	Review & Comment by JV	18	05-Sep-14	26-Sep-14	26-Dec-14A	30-Dec-14A
DD01310	Designer prepare DDA	10	27-Sep-14	10-Oct-14	31-Dec-14A	31-Dec-14A
DD01315	Formal Submission of DDA to ICE/ IPs	0		10-Oct-14		02-Jan-15A
DD01320	Advanced Submission to SO	0		10-Oct-14		02-Jan-15A
DD01325	IPs/ SO's Advance Comments/ ICE Comments	28	11-Oct-14	07-Nov-14	02-Jan-15A	23-Jan-15A
DD01330	Comments Received	0		07-Nov-14		23-Jan-15A
DD01335	Designer to Reply RtC + Update Submission	21	08-Nov-14	02-Dec-14	24-Jan-15A	30-Jan-15A
DD01340	Submit Updated DDA to SO/ ICE/ IPs	0	03-Dec-14		30-Jan-15A	
DD01345	ICE Approval & Issue Check Cert	12	03-Dec-14	16-Dec-14	30-Jan-15A	31-Jan-15A
DD01350	Submit ICE Check Cert to SO	6	17-Dec-14	23-Dec-14	02-Feb-15A	05-Feb-15A
DD01355	IPs Review	28	03-Dec-14	30-Dec-14	30-Jan-15A	31-Mar-15
DD01360	IPs No Objection Received	0		30-Dec-14		31-Mar-15
DD01380	SO's Review	35	03-Dec-14	06-Jan-15	30-Jan-15A	04-Apr-15
DD01385	SO Approval with Condition Received	0		06-Jan-15		08-Apr-15

**(I2) DDA for North Vent. Bldgs. Structural Design incl. Vent. Connections**

DD68008	Preparation of DDA North VB Structural Design incl Vent conn	18	05-Sep-14	26-Sep-14	24-Jan-15A	11-Apr-15
DD68018	Review & Comment by JV	18	27-Sep-14	20-Oct-14	13-Apr-15	04-May-15
DD68020	Designer prepare DDA	10	21-Oct-14	31-Oct-14	05-May-15	15-May-15
DD68028	Formal Submission of DDA to ICE/ IPs	0		31-Oct-14		15-May-15
DD68030	Advanced Submission to SO	0		31-Oct-14		15-May-15
DD68038	IPs/ SO's Advance Comments/ ICE Comments	28	01-Nov-14	28-Nov-14	16-May-15	12-Jun-15
DD68040	Comments Received	0		28-Nov-14		12-Jun-15
DD68048	Designer to Reply RtC + Update Submission	21	29-Nov-14	23-Dec-14	13-Jun-15	09-Jul-15

**(I3) DDA for North & South Vent. Bldgs. Service and E&M Provision**

DD01600	Preparation of DDA North VB Service and E&MS Provision	18	12-Sep-14	04-Oct-14	30-Mar-15	23-Apr-15
DD01605	Review & Comment by JV	24	06-Oct-14	01-Nov-14	24-Apr-15	22-May-15
DD01610	Designer prepare DDA	15	03-Nov-14	19-Nov-14	23-May-15	10-Jun-15
DD01615	Formal Submission of DDA to ICE/ IPs	0		19-Nov-14		10-Jun-15
DD01620	Advanced Submission to SO	0		19-Nov-14		10-Jun-15
DD01625	IPs/ SO's Advance Comments/ ICE Comments	28	20-Nov-14	17-Dec-14	11-Jun-15	08-Jul-15

**(J1) AIP Temp. works for Construction of Nth. Vent. Bldg.**

AP01880	SO Review (35 Days)	35	15-Aug-14	18-Sep-14	10-Dec-14A	07-Jan-15A
AP01885	SO Approval with Condition Received	0		18-Sep-14		07-Jan-15A

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Project ID: TMCLK\_DWPC 15W13

Data Date: 30-Mar-15

**TMCLK - Northern Connection Sub-Sea Tunnel Section**

Detailed Works Programme (Rev. C) - Three months rolling programme

Progress as of 30-Mar-15



Date	Revision	Checked	Approved
21-Feb-14	TMCLKDUBJEN.PRG.08505	SPa	WYu
28-Aug-14	TMCLKDUBJEN.PRG.08505 Rev.C	CLa	WYu

■ Planned Bar  
■ Planned Bar - Critical  
◆ Planned Milestone  
■ Progress bar  
◆ Progress Milestone





Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	2014											
							Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	2015	2016	2017
AP3210	SO Review (35 Days)	35	14-Oct-14	17-Nov-14	03-Dec-14A	01-Apr-15	SO Review (35 Days)											
AP3220	SO Approval with Condition Received	0		17-Nov-14		01-Apr-15	SO Approval with Condition Received											
<b>(E2) DDA for South C&amp;C Box &amp; Approach Ramp</b>																		
DD00460	Preparation DDA Sth C&C Box and Approach Ramp	18	18-Nov-14	08-Dec-14	02-Apr-15	27-Apr-15	Preparation DDA Sth C&C Box and Approach Ramp											
DD00470	Review & Comment by JV	18	09-Dec-14	31-Dec-14	28-Apr-15	19-May-15	Review & Comment by JV											
DD00480	Designer prepare DDA	10	02-Jan-15	13-Jan-15	20-May-15	01-Jun-15	Designer prepare DDA											
DD00490	Formal Submission of DDA to ICE/ IPs	0		13-Jan-15		01-Jun-15	Formal Submission of DDA to ICE/ IPs											
DD00500	Advanced Submission to SO	0		13-Jan-15		01-Jun-15	Advanced Submission to SO											
DD00510	IPs/ SO's Advance Comments/ ICE Comments	28	14-Jan-15	10-Feb-15	02-Jun-15	29-Jun-15	IPs/ SO's Advance Comments/ ICE Comments											
DD00520	Comments Received	0		10-Feb-15		29-Jun-15	Comments Received											
<b>(F3) AIP Temp. Support for South C&amp;C, Portal &amp; ELS</b>																		
DD69590	Prepare AIP South C&C ELS	18	20-Sep-14	13-Oct-14	02-Mar-15A	19-Mar-15A	Prepare AIP South C&C ELS											
DD69600	Review & Comment by JV	18	14-Oct-14	03-Nov-14	20-Mar-15A	14-Apr-15	Review & Comment by JV											
DD69610	Designer prepare AIP	10	04-Nov-14	14-Nov-14	15-Apr-15	25-Apr-15	Designer prepare AIP											
DD69620	Formal Submission of AIP to ICE/ IPs	0		14-Nov-14		25-Apr-15	Formal Submission of AIP to ICE/ IPs											
DD69630	Advanced Submission to SO	0		14-Nov-14		25-Apr-15	Advanced Submission to SO											
DD69640	IPs/ SO's Advance Comments/ ICE Comments	28	15-Nov-14	12-Dec-14	26-Apr-15	23-May-15	IPs/ SO's Advance Comments/ ICE Comments											
DD69650	Comments Received	0		12-Dec-14		23-May-15	Comments Received											
DD69660	Designer to Reply RTC + Update Submission	21	13-Dec-14	09-Jan-15	26-May-15	18-Jun-15	Designer to Reply RTC + Update Submission											
DD69670	Submit Updated AIP to SO/ ICE/ IPs	0	10-Jan-15		19-Jun-15		Submit Updated AIP to SO/ ICE/ IPs											
DD69680	ICE Approval & Issue Check Cert	12	10-Jan-15	23-Jan-15	19-Jun-15	04-Jul-15	ICE Approval & Issue Check Cert											
DD69690	IPs Review	28	10-Jan-15	06-Feb-15	19-Jun-15	16-Jul-15	IPs Review											
DD69710	SO's Review	35	10-Jan-15	13-Feb-15	19-Jun-15	23-Jul-15	SO's Review											
<b>Method Statement Submission</b>																		
<b>Method Statement of Construction Methodology of C&amp;C Tunnels</b>																		
MS1700	Preparation Method Statement for C&C Tunnels	25	28-Mar-15	30-Apr-15	30-Mar-15	02-May-15	Preparation Method Statement for C&C Tunnels											
MS1710	Submit Method Statement to SO	0		30-Apr-15		02-May-15	Submit Method Statement to SO											
MS1720	SO Reviews & Comments	28	01-May-15	28-May-15	03-May-15	30-May-15	SO Reviews & Comments											
MS1730	Re-submission	18	29-May-15	18-Jun-15	01-Jun-15	22-Jun-15	Re-submission											
MS1740	SO's Review	28	19-Jun-15	16-Jul-15	23-Jun-15	20-Jul-15	SO's Review											
<b>South Retrieval Shaft</b>																		
<b>Design Submission</b>																		
<b>(A4) Additional Ground Investigation Plan - Phase 3 - Southern Landfall</b>																		
GS2870	Preparation of Additional Ground Investigation (Phase 3)	11	15-Jan-15	27-Jan-15	20-Feb-15A	02-Mar-15A	Preparation of Additional Ground Investigation (Phase 3)											
GS2880	1st Submission	0		27-Jan-15		02-Mar-15A	1st Submission											
GS2905	SO's Comments for 1st Submission	35	28-Jan-15	03-Mar-15	02-Mar-15A	08-Apr-15	SO's Comments for 1st Submission											
GS2910	SO's Condition Approval	0		03-Mar-15		08-Apr-15	SO's Condition Approval											
<b>(A5) Ground Investigation Report - Phase 3 - Southern Landfall</b>																		
GS2960	Preparation of Ground Investigation Report - Phase 3 - Southern Landfall	36	01-Apr-15	18-May-15	08-May-15	19-Jun-15	Preparation of Ground Investigation Report - Phase 3 - Southern Landfall											
GS2970	*1st Submission	0		18-May-15		19-Jun-15	*1st Submission											
GS2980	SO's Comments for 1st Submission	35	19-May-15	22-Jun-15	20-Jun-15	24-Jul-15	SO's Comments for 1st Submission											
<b>(B5) AIP Construction Risk Assessment - Impact on South Landfall</b>																		
GS01200	Preparation of Construction Risk Assessment - Impact on South Landfall	36	30-Oct-14	10-Dec-14	02-Feb-15A	31-Mar-15	Preparation of Construction Risk Assessment - Impact on South Landfall											
GS01205	1st Submission	0		10-Dec-14		31-Mar-15	1st Submission											
GS01210	SO's Comments for 1st Submission	35	11-Dec-14	14-Jan-15	01-Apr-15	05-May-15	SO's Comments for 1st Submission											
GS01215	Prepare Re-submission	10	15-Jan-15	26-Jan-15	06-May-15	16-May-15	Prepare Re-submission											
GS01220	2nd Submission	0		26-Jan-15		16-May-15	2nd Submission											
GS01225	ICE Cert. Issue	6	27-Jan-15	02-Feb-15	18-May-15	23-May-15	ICE Cert. Issue											
GS01250	SO's Condition Approval	35	27-Jan-15	02-Mar-15	17-May-15	20-Jun-15	SO's Condition Approval											
<b>(B5) DDA Construction Risk Assessment - Impact on South Landfall</b>																		
DD68500	Preparation of Construction Risk Assessment - Impact on South Landfall	36	03-Mar-15	17-Apr-15	22-Jun-15	03-Aug-15	Preparation of Construction Risk Assessment - Impact on South Landfall											
<b>(F1) AIP Temp. works - Retrieval Shaft on Southern Landfall incl. break-out</b>																		
AP01600	Preparation of AIP Retrieval Shaft on Sth Landfall incl. break out	12	20-Sep-14	06-Oct-14	02-Mar-15A	13-Mar-15A	Preparation of AIP Retrieval Shaft on Sth Landfall incl. break out											
AP01605	Review & Comment by JV	12	07-Oct-14	20-Oct-14	13-Mar-15A	31-Mar-15	Review & Comment by JV											
AP01610	Designer Prepare AIP	6	21-Oct-14	27-Oct-14	01-Apr-15	11-Apr-15	Designer Prepare AIP											
AP01615	Formal Submission of AIP to ICE/ IPs	0		27-Oct-14		11-Apr-15	Formal Submission of AIP to ICE/ IPs											
AP01620	Advanced Submission of AIP to SO	0		27-Oct-14		11-Apr-15	Advanced Submission of AIP to SO											
AP01625	Review & Comment by SO/ ICE/ IPs	28	28-Oct-14	24-Nov-14	12-Apr-15	09-May-15	Review & Comment by SO/ ICE/ IPs											
AP01630	Advance Comments from SO/ Comments from ICE/ IPs Received	0		24-Nov-14		09-May-15	Advance Comments from SO/ Comments from ICE/ IPs Received											
AP01635	Designer to Prepare RTC & Updated AIP	18	25-Nov-14	15-Dec-14	11-May-15	01-Jun-15	Designer to Prepare RTC & Updated AIP											
AP01640	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)	0		15-Dec-14		01-Jun-15	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)											
AP01645	Reply to IPs Comments in RTC	0		15-Dec-14		01-Jun-15	Reply to IPs Comments in RTC											
AP01650	ICE Approval & Issue of Design Check Cert.	18	16-Dec-14	08-Jan-15	02-Jun-15	23-Jun-15	ICE Approval & Issue of Design Check Cert.											
AP01655	Check Cert to SO	0		08-Jan-15		23-Jun-15	Check Cert to SO											
AP01660	No Objection or Further Minor Comments from IPs Received	0		08-Jan-15		23-Jun-15	No Objection or Further Minor Comments from IPs Received											
AP01680	SO Review (35 Days)	35	17-Dec-14	20-Jan-15	02-Jun-15	06-Jul-15	SO Review (35 Days)											
<b>(F2) AIP Temp. works of Ground Treatment for TBMs passing under Southern Landfall</b>																		
AP01900	Preparation of AIP Ground Improvement works in Sth Landfall Seawall	18	01-Sep-14	22-Sep-14	27-Mar-15A	27-Mar-15A	Preparation of AIP Ground Improvement works in Sth Landfall Seawall											
AP01905	Review & Comment by JV	18	23-Sep-14	15-Oct-14	27-Mar-15A	27-Mar-15A	Review & Comment by JV											
AP01910	Designer Prepare AIP	12	16-Oct-14	29-Oct-14	27-Mar-15A	27-Mar-15A	Designer Prepare AIP											
AP01915	Formal Submission of AIP to ICE/ IPs	0		29-Oct-14		27-Mar-15A	Formal Submission of AIP to ICE/ IPs											
AP01920	Advanced Submission of AIP to SO	0		29-Oct-14		27-Mar-15A	Advanced Submission of AIP to SO											
AP01925	Review & Comment by SO/ ICE/ IPs	28	30-Oct-14	26-Nov-14	27-Mar-15A	27-Mar-15A	Review & Comment by SO/ ICE/ IPs											
AP01930	Advance Comments from SO/ Comments from ICE/ IPs Received	0		26-Nov-14		27-Mar-15A	Advance Comments from SO/ Comments from ICE/ IPs Received											
AP01935	Designer to Prepare RTC & Updated AIP	18	27-Nov-14	17-Dec-14	27-Mar-15A	27-Mar-15A	Designer to Prepare RTC & Updated AIP											

■ Planned Bar  
■ Planned Bar - Critical  
◆ Planned Milestone  
■ Progress bar  
◆ Progress Milestone

TMCLK - Northern Connection Sub-Sea Tunnel Section  
 Detailed Works Programme (Rev. C) - Three months rolling programme  
 Progress as of 30-Mar-15



Date	Revision	Checked	Approved
21-Feb-14	TMCLKDJEN.PRG.08505	SPa	WYu
28-Aug-14	TMCLKDJEN.PRG.08505 Rev. C	CLa	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	2014 2015											
							Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug			
AP01940	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)	0		17-Dec-14		30-Mar-15	◆ Submission of AIP to SO/ ICE together with Reply To Comment (RTC)											
AP01945	Reply to IPs Comments in RTC	0		17-Dec-14		30-Mar-15	◆ Reply to IPs Comments in RTC											
AP01950	ICE Approval & Issue of Design Check Cert.	18	18-Dec-14	10-Jan-15	30-Mar-15	23-Apr-15	ICE Approval & Issue of Design Check Cert.											
AP01955	Check Cert to SO	0		10-Jan-15		23-Apr-15	◆ Check Cert to SO											
AP01960	No Objection or Further Minor Comments from IPs Received	0		10-Jan-15		23-Apr-15	◆ No Objection or Further Minor Comments from IPs Received											
AP01980	SO Review (35 Days)	35	19-Dec-14	22-Jan-15	02-Apr-15	06-May-15	SO Review (35 Days)											
AP01985	SO Approval with Condition Received	0		22-Jan-15		06-May-15	◆ SO Approval with Condition Received											
<b>(F2) DDA Temp works of Ground Treatment for TBMs passing under Southern Landfall</b>																		
DD04740	Preparation of DDA Ground Improvement in Southern Landfall Seawall	18	01-Apr-15	25-Apr-15	08-May-15	29-May-15	Preparation of DDA Ground Improvement in Southern Landfall Seawall											
DD04750	Review & Comment by JV	18	27-Apr-15	18-May-15	30-May-15	19-Jun-15	Review & Comment by JV											
DD04760	Designer prepare DDA	6	19-May-15	26-May-15	22-Jun-15	27-Jun-15	Designer prepare DDA											
DD04770	Formal Submission of DDA to ICE/ IPs	0		26-May-15		27-Jun-15	◆ Formal Submission of DDA to ICE/ IPs											
DD04780	Advanced Submission to SO	0		26-May-15		27-Jun-15	◆ Advanced Submission to SO											
DD04790	IPs/ SO's Advance Comments/ ICE Comments	28	27-May-15	23-Jun-15	28-Jun-15	25-Jul-15	IPs/ SO's Advance Comments/ ICE Comments											
<b>South Ventilation Building</b>																		
<b>Design Submission</b>																		
<b>(I1) DDA for South Vent. Bldg. GBP &amp; Arch. Submission</b>																		
DD01400	Preparation of DDA Sth VB GBP & Arch Submission	18	21-Aug-14	11-Sep-14	12-Jan-15A	12-Feb-15A	Preparation of DDA Sth VB GBP & Arch Submission											
DD01405	Review & Comment by JV	24	12-Sep-14	11-Oct-14	13-Feb-15A	20-Feb-15A	Review & Comment by JV											
DD01410	Designer prepare DDA	15	13-Oct-14	29-Oct-14	21-Feb-15A	25-Feb-15A	Designer prepare DDA											
DD01415	Formal Submission of DDA to ICE/ IPs	0		29-Oct-14		25-Feb-15A	◆ Formal Submission of DDA to ICE/ IPs											
DD01420	Advanced Submission to SO	0		29-Oct-14		25-Feb-15A	◆ Advanced Submission to SO											
DD01425	IPs/ SO's Advance Comments/ ICE Comments	28	30-Oct-14	26-Nov-14	25-Feb-15A	04-May-15	IPs/ SO's Advance Comments/ ICE Comments											
DD01430	Comments Received	0		26-Nov-14		04-May-15	◆ Comments Received											
DD01435	Designer to Reply RTC + Update Submission	21	27-Nov-14	20-Dec-14	05-May-15	29-May-15	Designer to Reply RTC + Update Submission											
DD01440	Submit Updated DDA to SO/ ICE/ IPs	0		22-Dec-14		30-May-15	◆ Submit Updated DDA to SO/ ICE/ IPs											
DD01445	ICE Approval & Issue Check Cert	18	22-Dec-14	14-Jan-15	30-May-15	19-Jun-15	ICE Approval & Issue Check Cert											
DD01450	Submit ICE Check Cert to SO	6	15-Jan-15	21-Jan-15	22-Jun-15	27-Jun-15	Submit ICE Check Cert to SO											
DD01455	IPs Review	28	22-Dec-14	18-Jan-15	30-May-15	26-Jun-15	IPs Review											
DD01460	IPs No Objection Received	0		18-Jan-15		26-Jun-15	◆ IPs No Objection Received											
DD01465	SO's Review	35	22-Dec-14	25-Jan-15	30-May-15	03-Jul-15	SO's Review											
<b>(I2) DDA for South Vent. Bldg. Foundation Design</b>																		
DD01500	Preparation of DDA Sth VB Foundation	18	01-Apr-15	25-Apr-15	30-May-15	19-Jun-15	Preparation of DDA Sth VB Foundation											
DD01505	Review & Comment by JV	18	27-Apr-15	18-May-15	22-Jun-15	13-Jul-15	Review & Comment by JV											
<b>South Surface Roadworks, Utility &amp; Drainage works</b>																		
<b>Design Submission</b>																		
<b>(E3) DDA for Sewerage, Drainage, Waterworks &amp; Utility works for South Landfall</b>																		
DD05810	Preparation of DDA Sewerage & Drainage works for Sth Landfall	18	08-Nov-14	28-Nov-14	02-Mar-15A	15-Mar-15A	Preparation of DDA Sewerage & Drainage works for Sth Landfall											
DD05820	Review & Comment by JV	18	29-Nov-14	19-Dec-14	16-Mar-15A	25-Mar-15A	Review & Comment by JV											
DD05830	Designer prepare DDA	10	20-Dec-14	03-Jan-15	25-Mar-15A	27-Mar-15A	Designer prepare DDA											
DD05840	Advanced Submission to SO	0		03-Jan-15		27-Mar-15A	◆ Advanced Submission to SO											
DD05850	Formal Submission of DDA to ICE/ IPs	0		03-Jan-15		27-Mar-15A	◆ Formal Submission of DDA to ICE/ IPs											
DD05860	IPs/ SO's Advance Comments/ ICE Comments	28	04-Jan-15	31-Jan-15	30-Mar-15	26-Apr-15	IPs/ SO's Advance Comments/ ICE Comments											
DD05870	Comments Received	0		31-Jan-15		27-Apr-15	◆ Comments Received											
DD05880	Designer to Reply RTC + Update Submission	21	02-Feb-15	04-Mar-15	27-Apr-15	21-May-15	Designer to Reply RTC + Update Submission											
DD05890	Submit Updated DDA to SO/ ICE/ IPs	0		05-Mar-15		22-May-15	◆ Submit Updated DDA to SO/ ICE/ IPs											
DD05900	ICE Approval & Issue Check Cert	12	05-Mar-15	18-Mar-15	22-May-15	05-Jun-15	ICE Approval & Issue Check Cert											
DD05910	Submit ICE Check Cert to SO	6	19-Mar-15	25-Mar-15	06-Jun-15	12-Jun-15	Submit ICE Check Cert to SO											
DD05920	IPs Review	28	05-Mar-15	01-Apr-15	22-May-15	18-Jun-15	IPs Review											
DD05930	IPs No Objection Received	0		01-Apr-15		18-Jun-15	◆ IPs No Objection Received											
DD05940	SO's Review	35	05-Mar-15	08-Apr-15	22-May-15	25-Jun-15	SO's Review											
DD05950	SO Approval with Condition Received	0		08-Apr-15		25-Jun-15	◆ SO Approval with Condition Received											

- Planned Bar
- Planned Bar - Critical
- ◆ Planned Milestone
- Progress bar
- ◆ Progress Milestone

TMCLK - Northern Connection Sub-Sea Tunnel Section  
Detailed Works Programme (Rev. C) - Three months rolling programme  
Progress as of 30-Mar-15



Date	Revision	Checked	Approved
21-Feb-14	TMCLKDBJGEN.PRG.08505	SPa	WYu
28-Aug-14	TMCLKDBJGEN.PRG.08505 Rev. C	CLa	WYu

Appendix C

Environmental Mitigation  
and Enhancement Measure  
Implementation Schedules

**Contract No. HY/2012/08**  
**Tuen Mun – Chek Lap Kok Link**  
**Northern Connection Sub-sea Tunnel Section**  
**Environmental Mitigation and Enhancement Measure Implementation Schedule**

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
<b>Air Quality</b>									
4.8.1	3.8	An effective watering programme of twice daily watering with complete coverage, is estimated to reduce by 50%. This is recommended for all areas in order to reduce dust levels to a minimum;	All areas / throughout construction period	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		<>
4.8.1	3.8	Watering of the construction sites in Lantau for 8 times/day and in Tuen Mun for 12 times/day to reduce dust emissions by 87.5% and 91.7% respectively and shall be undertaken.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	The Contractor shall, to the satisfaction of the Engineer, install effective dust suppression measures and take such other measures as may be necessary to ensure that at the Site boundary and any nearby sensitive receiver, dust levels are kept to acceptable levels.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	The Contractor shall not burn debris or other materials on the works areas.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	In hot, dry or windy weather, the watering programme shall maintain all exposed road surfaces and dust sources wet.	All unpaved haul roads / throughout construction period in hot, dry or windy weather	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓
4.8.1	3.8	Where breaking of oversize rock/concrete is required, watering shall be implemented to control dust. Water spray shall be used during the handling of fill material at the site and at active cuts, excavation and fill sites where dust is likely to be created.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	Open dropping heights for excavated materials shall be controlled to a maximum height of 2m to minimise the fugitive dust arising from unloading.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	During transportation by truck, materials shall not be loaded to a level higher than the side and tail boards, and shall be dampened or covered before transport.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓

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4.8.1	3.8	Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. The tarpaulin shall be properly secured and shall extend at least 300mm over the edges of the side and tail boards.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	No earth, mud, debris, dust and the like shall be deposited on public roads. Wheel washing facility shall be usable prior to any earthworks excavation activity on the site.	All site exits / throughout construction period	Contractor	TMEIA Avoid dust		Y		✓
4.8.1	3.8	Areas of exposed soil shall be minimised to areas in which works have been completed shall be restored as soon as is practicable.	All exposed surfaces / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	All stockpiles of aggregate or spoil shall be enclosed or covered and water applied in dry or windy condition.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		<>
4.11	Section 3	EM&A in the form of 1 hour and 24 hour dust monitoring and site audit.	All representative existing ASRs / throughout construction period	Contractor	EM&A Manual		Y		✓
<b>WATER QUALITY</b>									
<i>Marine Works (Sequence A)</i>									
6.1	Annex A	Construction of seawalls to be advanced by at least 200m before the main reclamation dredging and filling can commence. The protection by advanced seawall is a dynamic process depending on the progress of the construction activities and the stage when such protection could be realised is illustrated in Figure 6.2a and detailed in Appendix D6a. The part of the works where such measures can be undertaken for the majority of the time includes the following locations:  - TM-CLKL northern reclamation;	All areas/ prior to dredging and backfilling works	Contractor	TM-EIAO		Y		✓
6.1	-	a maximum of 50% public fill to be used for all seawall filling below +2.5mPD for TM-CLKL southern and northern landfalls.	TM-CLKL seawall filling	Contractor	TM-EIAO		Y		✓

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						D	C	O	
6.1	-	a maximum of 30% public fill to be used for reclamation filling below +2.5mPD for TM-CLKL southern landfall	TM-CLKL southern landfall reclamation filling	Contractor	TM-EIAO		Y		N/A
6.1	-	a maximum of 100% public fill to be used for reclamation filling below +2.5mPD for TM-CLKL northern landfall	TM-CLKL northern landfall reclamation filling	Contractor	TM-EIAO		Y		✓
6.1	-	Use of cage type silt curtains round allgrab dredgers during the HKBCF, HKLR and TM-CLKL southern reclamation works.	All areas dredging works	Contractor	TM-EIAO		Y		✓
	Figure 1.1 of Annex C	A layer of floating type silt curtain will be applied when dredging and reclamation works are being undertaken at Portion N-a as shown in Figure 1.1 of Annex C of the EM&A Manual.	All areas/ through out marine works	Contractor	TM-EIAO		Y		✓
6.1	-	Trailer suction hopper dredgers shall not allow mud to overflow.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.1	-	The use of Lean Material Overboard (LMOB) systems shall be prohibited.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓

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						D	C	O	
6.1  Figure 6.2b Appendix D6b	Annex A	For other parts of the reclamation works construction of seawalls to be advanced by at least 200m before the main reclamation dredging and filling can commence. It should be noted that the protection by advanced seawall is a dynamic process depending on the progress of the construction activities and the stage when such protection could be realised is illustrated in Figure 6.2b and detailed in Appendices D6b. The part of the works where such measures can be undertaken for the majority of the time includes the following locations:  - TM-CLKL northern reclamation;  - Reclamation filling for Portion D of HKBCF; Reclamation filling for FSD berth of HKBCF; and  - Reclamation dredging and filling for Portion 1 of HKLR;	TM-CLKL northern landfall, Portion D of HKBCF and HKLR	Contractor	TM-EIAO		Y		✓
6.1	-	The filling material for the other parts of the works are the same as Sequence A;	All other areas/backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	5.7	Cage type silt curtain (with steel enclosure) shall be used for grab dredgers working in the site of HKBCF and TM- CLKL southern reclamation. Cage type silt curtains will be applied round all grab dredgers at other works area.	HKBCF, HKLR and TM-CLKL grab dredging	Contractor	TM-EIAO		Y		✓
6.1	Annex A	A layer of floating type silt curtain will be applied around all works as defined in Appendix D6b.	All areas/ through out marine works	Contractor	TM-EIAO		Y		✓
6.1	-	TM-CLKL northern landfall: - Reclamation filling shall not proceed until at least 200m section of leading seawall at both the east and west sides of the reclamation are formed above +2.5 mPD, except for 100m gaps for marine access;	All areas/ through out marine works	Contractor	TM-EIAO		Y		✓

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						D	C	O	
<i>General Marine Works</i>									
6.1	-	Use of TBM for the construction of the submarine tunnel.	Tunnel works / Construction phase	Contractor	TM-EIAO		Y		N/A
6.1	-	Export dredged spoils from NWWCZ.	All areas as much as possible / dredging activities	Contractor	DASO Permit conditions		Y		✓
6.1	-	Where public fill is proposed for filling below +2.5mPD, the fine content in the public fill will be controlled to 25%	All areas/ backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	-	Where sand fill is proposed for filling below +2.5mPD, the fine content in the sand fill will be controlled to 5%.	All areas/ backfilling works	Contractor	TM-EIAO		Y		N/A
6.1	-	Mechanical grabs shall be designed and maintained to avoid spillage and should seal tightly while being lifted.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.1	-	Barges and hopper dredgers shall have tight fitting seals to their bottom openings to prevent leakage of material.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.1	-	Any pipe leakages shall be repaired quickly. Plant should not be operated with leaking pipes.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.1	-	Loading of barges and hoppers shall be controlled to prevent splashing of dredged material to the surrounding water. Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓

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						D	C	O	
6.1	-	Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.1	-	Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		N/A
6.1	-	The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.1	5.2	Silt curtain shall have proved effectiveness from the producer and shall be fully maintained throughout the works by the contractor.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	The daily maximum production rates shall not exceed those assumed in the water quality assessment.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	The dredging and filling works shall be scheduled to spread the works evenly over a working day.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

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						D	C	O	
<i>Land Works</i>									
6.1	-	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Sewage effluent and discharges from on- site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<>
6.1	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	5.8	Manholes (including any newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

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						D	C	O	
6.1	-	Discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	All vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for off site disposal.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.1	-	The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	All areas/ throughout construction period	Contractor	TM-EIAO Waste Disposal Ordinance		Y		✓
6.1	-	All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.1	-	Roadside gullies to trap silt and grit shall be provided prior to	Roadside/ design and operation	Design	TM-EIAO	Y		Y	✓

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						D	C	O	
		discharging the stormwater into the marine environment. The sumps will be maintained and cleaned at regular intervals.		Consultant/ Contractor					
6.1	Section 5	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice.	All areas/ throughout construction period	Contractor	EM&A Manual		Y		✓
<i>Water Quality Monitoring</i>									
6.1	Section 5	Water quality monitoring shall be undertaken for suspended solids, turbidity, and dissolved oxygen. Nutrients and metal parameters shall also be measured for Mf sediment operations (only HKBCF and HKLR required handling of Mf sediment) during baseline, backfilling and post construction period.  One year operation phase water quality monitoring at designated stations.	Designated monitoring stations as defined in EM&A Manual, Section 5/ Before, through-out marine construction period, post construction and monthly operational phase water quality monitoring for a year.	Contractor	EM&A Manual		Y	Y	✓
<b>ECOLOGY</b>									
8.14	6.3	Specification for and implement pre, during and post construction dolphin abundance monitoring.	All Areas/Detailed Design/ during construction works/post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y	✓
8.14	6.3,6.5	Specification and implementation of 250m dolphin exclusion zone.	All dredging and reclamation areas/Detailed Design/ during all reclamation and dredging works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.5	Specification and deployment of an artificial reef of an area of 3,600m <sup>2</sup> in an area where fishing activities are prohibited.	Area of prohibited fishing activities/Detailed Design/ towards end of construction period	TM-CLKL/ HKBCF Design Consultant/TM-CLKL/ HKBCF Contractor	TMEIA	Y		Y	N/A. To be implemented by AFCD.
8.14	6.3, 6.5	Specification and implementation of marine vessel control specifications	All areas/Detailed Design/ during construction works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.14	6.3, 6.5	Design and implementation of acoustic decoupling methods for dredging and reclamation works	All areas/ Detailed Design/ during dredging and reclamation works	Design Consultant/ Contractor	TMEIA	Y	Y		✓

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8.15	6.3, 6.4	Pre-construction phase survey and coral translocation	Detailed Design/Prior to construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.5	Audit coral translocation success	Post translocation	Contractor	TMEIA		Y		✓
7.13	6.5	The loss of habitat shall be supplemented by enhancement planting in accordance with the landscape mitigation schedule.	All areas / As soon as accessible	Contractor	TMEIA		Y		N/A
7.13	6.5	Spoil heaps shall be covered at all times.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Avoid damage and disturbance to the remaining and surrounding natural habitat	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Placement of equipment in designated areas within the existing disturbed land	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Disturbed areas to be reinstated immediately after completion of the works.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Construction activities should be restricted to the proposed works boundary.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
<b>LANDSCAPE AND VISUAL</b>									
10.9	7.6	The colour and shape of the toll control buildings, ventilation building and administration building shall adopt a design which could blend it into the vicinity elements, and the details will be developed in detailed design stage (DM2)	All areas/detailed design	Design Consultant	TMEIA	Y			N/A
10.9	7.6	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission (DM5)	All areas/detailed design	Design Consultant	TMEIA	Y			N/A
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓

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						D	C	O	
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities (OM5)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (OM6)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A
<b>WASTE</b>									
12.6		The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		✓
12.6		The Contractor shall prepare and implement a Waste Management Plan which specifies procedures such as a ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of wastes does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposed. A recording system for the amount of waste generated, recycled and disposed (locations) should be established.	Contract mobilisation	Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Y		✓

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						D	C	O	
12.6		The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Contract mobilisation	Contractor	TMEIA, Land (Miscellaneous Provisions) Ordinance (Cap 28); Waste Disposal Ordinance (Cap 354); Dumping at Sea Ordinance (Cap 466); Water Pollution Control Ordinance.		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures including waste reduction, reuse and recycling.	Contract Mobilisation	Contractor	TMEIA		Y		✓
12.6	8.1	The extent of cutting operation should be optimised where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The surplus surcharge should be transferred to a fill bank	Reclamation areas / after surcharge works	Contractor	TMEIA		Y		N/A
12.6	8.1	Rock armour from the existing seawall should be reused on the new sloping seawall as far as possible	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Provisions to be made in contract documents to allow and promote the use of recycled aggregates where appropriate.	Detailed Design	Design Consultant	TMEIA	Y			✓
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		✓

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

**Contract No. HY/2012/08**  
**Tuen Mun – Chek Lap Kok Link**  
**Northern Connection Sub-sea Tunnel Section**  
**Environmental Mitigation and Enhancement Measure Implementation Schedule**

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Dredged marine mud shall be disposed of in a gazetted marine disposal ground under the requirements of the Dumping at Seas Ordinance.	Reclamation areas / throughout dredging works	Contractor	TMEIA		Y		✓
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction materials should avoid over-ordering and wastage.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The Contractor should recycle as many C&D materials (this is a waste section) as possible on-site. The public fill and C&D waste should be segregated and stored in separate containers or skips to facilitate the reuse or recycling of materials and proper disposal. Where practicable, the concrete and masonry should be crushed and used as fill materials. Steel reinforcement bar should be collected for use by scrap steel mills. Different areas of the sites should be considered for segregation and storage activities.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	All falsework will be steel instead of wood.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Chemical waste producers should register with the EPD. Chemical waste should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows:  if suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed;	All areas / throughout construction period	Contractor	TMEIA		Y		<>

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

*Contract No. HY/2012/08  
Tuen Mun – Chek Lap Kok Link  
Northern Connection Sub-sea Tunnel Section  
Environmental Mitigation and Enhancement Measure Implementation Schedule*

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
		<ul style="list-style-type: none"> <li>f Having a capacity of &lt;450L unless the specifications have been approved by the EPD; and</li> <li>f Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations.</li> <li>f Clearly labelled and used solely for the storage of chemical wastes;</li> <li>f Enclosed with at least 3 sides;</li> <li>f Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest;</li> <li>f Adequate ventilation;</li> <li>f Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and</li> <li>f Incompatible materials are adequately separated.</li> </ul>							
12.6	8.1	Waste oils, chemicals or solvents shall not be disposed of to drain,	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Adequate numbers of portable toilets should be provided for on-site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilising them.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Night soil should be regularly collected by licensed collectors.	All areas / throughout construction period	Contractor	TMEIA		Y		N/A

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

**Contract No. HY/2012/08**  
**Tuen Mun – Chek Lap Kok Link**  
**Northern Connection Sub-sea Tunnel Section**  
**Environmental Mitigation and Enhancement Measure Implementation Schedule**

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
12.6	8.1	General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes. Sufficient dustbins shall be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By-laws. In addition, general refuse shall be cleared daily and shall be disposed of to the nearest licensed landfill or refuse transfer station. Burning of refuse on construction sites is prohibited.	All areas / throughout construction period	Contractor	TMEIA		Y		<>
12.6	8.1	All waste containers shall be in a secure area on hardstanding;	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including waste reduction, reuse and recycling.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.	Site Offices/ throughout construction period	Contractor	TMEIA		Y		✓
12.6	Section 8	EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site audit programme shall be undertaken.	All areas / throughout construction period	Contractor	EM&A Manual		Y		✓
<b>CULTURAL HERITAGE</b>									
11.8	Section 9	EM&A in the form of audit of the mitigation measures	All areas / throughout construction period	Highways Department	EIAO-TM		Y		N/A

**\* Remarks:**

- ✓ Compliance of Mitigation Measures
- <> Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Contractor
- Δ Deficiency of Mitigation Measures but rectified by Contractor
- N/A Not Applicable in Reporting Period

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Appendix D

## Summary of Action and Limit Levels

**Table D1 Action and Limit Levels for 1-hour and 24-hour TSP**

Parameters	Action	Limit
24 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR1 = 213 ASR5 = 238 AQMS1 = 213 ASR6 = 238 ASR10 = 214	260
1 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR1 = 331 ASR5 = 340 AQMS1 = 335 ASR6 = 338 ASR10 = 337	500

**Table D2 Action and Limit Levels for Water Quality**

Parameter	Action Level#	Limit Level#
DO in $\text{mg}/\text{L}$ <sup>(a)</sup>	<u>Surface and Middle</u> <b>5.0 mg/L</b>	<u>Surface and Middle</u> <b>4.2 mg/L</b>
	<u>Bottom</u> <b>4.7 mg/L</b>	<u>Bottom</u> <b>3.6 mg/L</b>
Turbidity in NTU (Depth-averaged <sup>(b), (c)</sup> )	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., <b>27.5 NTU</b>	130% of upstream control station at the same tide of the same day and 99%-ile of baseline data, i.e., <b>47.0 NTU</b>
SS in $\text{mg}/\text{L}$ (Depth-averaged <sup>(b), (c)</sup> )	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., <b>23.5 mg/L</b>	130% of upstream control station at the same tide of the same day and 10mg/L for WSD Seawater Intakes at Tuen Mun and 99%-ile of baseline data, i.e., <b>34.4 mg/L</b>

**Notes:**

# Baseline data: data from HKZMB Baseline Water Quality Monitoring between 6 and 31 October 2011.

- (a) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- (b) "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths
- (c) For turbidity and SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.
- (d) All figures given in the table are used for reference only, and EPD may amend the figures whenever it is considered as necessary
- (e) The 1%-ile of baseline data for surface and middle DO is 4.2 mg/L, whilst for bottom DO is 3.6 mg/L.

**Table D3** *Action and Limit Levels for Impact Dolphin Monitoring*

	North Lantau Social Cluster	
	NEL	NWL
Action Level	STG < 70% of baseline & ANI < 70% of baseline	STG < 70% of baseline & ANI < 70% of baseline
Limit Level	[STG < 40% of baseline & ANI < 40% of baseline] and STG < 40% of baseline & ANI < 40% of baseline	

**Notes:**

1. STG means quarterly encounter rate of number of dolphin sightings, which is **6.00 in NEL** and **9.85 in NWL** during the baseline monitoring period
2. ANI means quarterly encounter rate of total number of dolphins, which is **22.19 in NEL** and **44.66 in NWL** during the baseline monitoring period
3. For North Lantau Social Cluster, AL will be trigger if NEL or NWL fall below the criteria; LL will be triggered if both NEL and NWL fall below the criteria.

**Table D4** *Derived Value of Action Level (AL) and Limit Level (LL)*

	North Lantau Social Cluster	
	NEL	NWL
Action Level	STG < 4.2 & ANI < 15.5	STG < 6.9 & ANI < 31.3
Limit Level	NEL = [STG < 2.4 & ANI < 8.9] and NWL = [STG < 3.9 & ANI < 17.9]	



Appendix E

Copies of Calibration  
Certificates for Air Quality  
and Water Quality  
Monitoring

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR 5  
 Calibrated by : P.F. Yeung  
 Date : 10/02/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 0816

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 14 Mar 2014  
 Slope (m) : 2.07593  
 Intercept (b) : -0.00102  
 Correlation Coefficient(r) : 0.99996

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1022  
 Ta(K) : 288

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1   18 holes	12.5	3.612	1.741	57	58.24
2   13 holes	9.5	3.149	1.517	50	51.09
3   10 holes	7.4	2.779	1.339	44	44.96
4   7 holes	4.8	2.238	1.079	35	35.76
5   5 holes	2.8	1.710	0.824	28	28.61

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 32.792 Intercept(b): 1.098 Correlation Coefficient(r): 0.9993

Checked by: Magnum Fan

Date: 16/02/2015

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR10  
 Calibrated by : P.F. Yeung  
 Date : 10/02/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 8162

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 14 Mar 2014  
 Slope (m) : 2.07593  
 Intercept (b) : -0.00102  
 Correlation Coefficient(r) : 0.99996

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1022  
 Ta(K) : 288

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.6	3.590	1.730	62	62.71
2	13 holes	9.2	3.068	1.478	52	52.60
3	10 holes	7.0	2.676	1.290	45	45.52
4	7 holes	4.6	2.169	1.047	36	36.41
5	5 holes	2.8	1.693	0.816	28	28.32

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 37.576 Intercept(b): -2.680 Correlation Coefficient(r): 0.9997

Checked by: Magnum Fan

Date: 16/02/15

High-Volume TSP Sampler  
5-Point Calibration Record

Location : AQMS1  
 Calibrated by : P.F. Yeung  
 Date : 10/02/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 1253

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 14 Mar 2014  
 Slope (m) : 2.07593  
 Intercept (b) : -0.00102  
 Correlation Coefficient(r) : 0.99996

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1022  
 Ta(K) : 288

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.6	3.627	1.748	54	55.17
2	13 holes	9.8	3.198	1.541	48	49.04
3	10 holes	7.5	2.798	1.348	42	42.91
4	7 holes	5.0	2.285	1.101	36	36.78
5	5 holes	2.9	1.740	0.839	29	29.63

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 27.982 Intercept(b): 5.901 Correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 16/02/2015

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR 1  
 Calibrated by : P.F.Yeung  
 Date : 10/02/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 0146

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 14 Mar 2014  
 Slope (m) : 2.07593  
 Intercept (b) : -0.00102  
 Correlation Coefficient(r) : 0.99996

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1022  
 Ta(K) : 288

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1   18 holes	11.9	3.525	1.698	53	54.15
2   13 holes	9.5	3.149	1.517	47	48.02
3   10 holes	7.0	2.703	1.303	40	40.87
4   7 holes	4.7	2.215	1.068	32	32.70
5   5 holes	2.8	1.710	0.824	24	24.52

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 33.930 Intercept(b): -3.447 Correlation Coefficient(r): 0.9993

Checked by: Magnum Fan

Date: 16/02/2015

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR 6  
 Calibrated by : P.F.Yeung  
 Date : 10/02/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 3957

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 14 Mar 2014  
 Slope (m) : 2.05818  
 Intercept (b) : 0.01929  
 Correlation Coefficient(r) : 0.99991

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1022  
 Ta(K) : 288

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1   18 holes	12.8	3.655	1.761	54	55.17
2   13 holes	9.8	3.198	1.541	48	49.04
3   10 holes	7.2	2.742	1.321	41	41.89
4   7 holes	4.5	2.167	1.045	33	33.72
5   5 holes	2.9	1.740	0.839	27	27.59

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 30.101      Intercept(b): 2.309      Correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 16/02/2015

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR 5  
 Calibrated by : P.F. Yeung  
 Date : 10/04/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 0816

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2015  
 Slope (m) : 2.09532  
 Intercept (b) : -0.03812  
 Correlation Coefficient(r) : 0.99994

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1013  
 Ta(K) : 295

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.0	3.482	1.680	52	52.26
2	13 holes	9.6	3.114	1.504	47	47.24
3	10 holes	7.0	2.659	1.287	40	40.20
4	7 holes	4.4	2.108	1.024	32	32.16
5	5 holes	2.7	1.652	0.806	24	24.12

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 32.076 Intercept(b): 1.232 Correlation Coefficient(r): 0.9993

Checked by: Magnum Fan

Date: 15/04/2015

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR10  
 Calibrated by : P.F. Yeung  
 Date : 10/04/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 8162

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2015  
 Slope (m) : 2.09532  
 Intercept (b) : -0.03812  
 Correlation Coefficient(r) : 0.99994

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1013  
 Ta(K) : 295

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.6	3.423	1.652	58	58.29
2	13 holes	9.0	3.015	1.457	52	52.26
3	10 holes	6.8	2.621	1.269	44	44.22
4	7 holes	4.4	2.108	1.024	36	36.18
5	5 holes	2.8	1.682	0.821	28	28.14

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 36.442 Intercept(b): -1.537 Correlation Coefficient(r): 0.9991

Checked by: Magnum Fan

Date: 15/04/15



High-Volume TSP Sampler  
5-Point Calibration Record

Location : AQMS1  
 Calibrated by : P.F. Yeung  
 Date : 10/04/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 1253

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2015  
 Slope (m) : 2.09532  
 Intercept (b) : -0.03812  
 Correlation Coefficient(r) : 0.99994

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1013  
 Ta(K) : 295

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.0	3.482	1.680	50	50.25
2	13 holes	9.4	3.081	1.489	44	44.22
3	10 holes	7.0	2.659	1.287	38	38.19
4	7 holes	4.4	2.108	1.024	30	30.15
5	5 holes	2.6	1.621	0.792	24	24.12

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 26.569 Intercept(b): 0.297 Correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 15/04/2015

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR 1  
 Calibrated by : P.F.Yeung  
 Date : 10/04/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 0146

Calibration Office and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2015  
 Slope (m) : 2.09532  
 Intercept (b) : -0.03812  
 Correlation Coefficient(r) : 0.99994

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1013  
 Ta(K) : 295

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1   18 holes	11.8	3.453	1.666	56	56.28
2   13 holes	9.2	3.049	1.473	49	49.25
3   10 holes	6.8	2.621	1.269	42	42.21
4   7 holes	4.8	2.202	1.069	35	35.18
5   5 holes	2.7	1.652	0.806	25	25.13

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 36.016 Intercept(b): -3.652 Correlation Coefficient(r): 0.9998

Checked by: Magnum Fan

Date: 15/04/2015

High-Volume TSP Sampler  
5-Point Calibration Record

Location : ASR 6  
 Calibrated by : P.F. Yeung  
 Date : 10/04/2015

Sampler

Model : TE-5170  
 Serial Number : S/N 3957

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454  
 Service Date : 24 Mar 2015  
 Slope (m) : 2.09532  
 Intercept (b) : -0.03812  
 Correlation Coefficient(r) : 0.99994

Standard Condition

Pstd (hpa) : 1013  
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1013  
 Ta(K) : 295

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1   18 holes	12.4	3.539	1.707	54	54.27
2   13 holes	9.8	3.146	1.520	48	48.24
3   10 holes	7.2	2.697	1.305	41	41.21
4   7 holes	4.6	2.156	1.047	34	34.17
5   5 holes	2.8	1.682	0.821	26	26.13

Notes:  $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$ ,  $X = Z/m - b$ ,  $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 31.297      Intercept(b): 0.744      Correlation Coefficient(r): 0.9993

Checked by: Magnum Fan

Date: 15/04/2015

**ENVIROTECH SERVICES CO.**

**Calibration Report of Wind Meter**

Date of Calibration : 29 December 2014

Brand of Test Meter: Davis

Model: Weather Wizard III (s/n: WE90911A30)

Location : ASR5

Procedures :

- 1. Wind Still Test: The wind speed sensor was hold by hand until it keep still
- 2. Wind Speed Test: The wind meter was on-site calibrated against the Anemometer
- 3. Wind Direction Test : The wind meter was on-site calibrated against the marine compass at four directions

Results:

Wind Still Test

Wind Speed (m/s)
0.00

Wind Speed Test

Davis (m/s)	Anemomete (m/s)
1.4	1.6
1.9	1.7
2.4	2.5

Wind Direction Test

Davis (o)	Marine Compass (o)
271	270
0	0
91	90
179	180

Calibrated by: Fai  
Yeung Ping Fai  
(Technical Officer)

Checked by : Fat  
Ho Kam Fat  
(Senior Technical Officer)



TISCH ENVIRONMENTAL, INC.  
 145 SOUTH MIAMI AVE  
 VILLAGE OF CLEVELAND, OH  
 45002  
 513.467.9000  
 877.263.7610 TOLL FREE  
 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 24, 2015 Rootmeter S/N 0438320 Ta (K) - 292  
 Operator Tisch Orifice I.D. - 2454 Pa (mm) - 756.92

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.4460	3.2	2.00
2	NA	NA	1.00	1.0300	6.4	4.00
3	NA	NA	1.00	0.9180	7.9	5.00
4	NA	NA	1.00	0.8780	8.7	5.50
5	NA	NA	1.00	0.7240	12.6	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
1.0121	0.6999	1.4258	0.9958	0.6886	0.8784
1.0078	0.9785	2.0163	0.9916	0.9627	1.2422
1.0057	1.0955	2.2543	0.9895	1.0779	1.3888
1.0047	1.1443	2.3644	0.9885	1.1258	1.4566
0.9994	1.3805	2.8515	0.9833	1.3582	1.7568
Qstd slope (m) = 2.09532			Qa slope (m) = 1.31205		
intercept (b) = -0.03812			intercept (b) = -0.02349		
coefficient (r) = 0.99994			coefficient (r) = 0.99994		
y axis = SQRT[H2O(Pa/760) (298/Ta)]			y axis = SQRT[H2O(Ta/Pa)]		

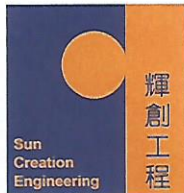
CALCULATIONS

Vstd = Diff. Vol [(Pa-Diff. Hg) / 760] (298/Ta)  
 Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg) / Pa]  
 Qa = Va/Time

For subsequent flow rate calculations:

Qstd = 1/m { [SQRT(H2O(Pa/760) (298/Ta))] - b }  
 Qa = 1/m { [SQRT H2O(Ta/Pa)] - b }



輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

# Certificate of Calibration

## 校正證書

Certificate No. : C146966

證書編號

ITEM TESTED / 送檢項目 ( Job No. / 序引編號 : IC14-2877 )      Date of Receipt / 收件日期 : 12 November 2014

Description / 儀器名稱 : Anemometer

Manufacturer / 製造商 : Lutron

Model No. / 型號 : AM-4201

Serial No. / 編號 : AF.27513

Supplied By / 委託者 : Envirotech Services Co.  
Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,  
Hong Kong

### TEST CONDITIONS / 測試條件

Temperature / 溫度 :  $(23 \pm 2)^{\circ}\text{C}$

Relative Humidity / 相對濕度 :  $(55 \pm 20)\%$

Line Voltage / 電壓 : ---

### TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 14 November 2014

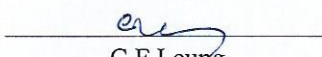
### TEST RESULTS / 測試結果

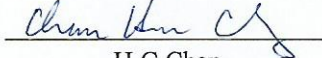
The results apply to the particular unit-under-test only.

The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- Testo Industrial Services GmbH, Germany

Tested By :   
測試 : C F Leung  
Project Engineer

Certified By :   
核證 : H C Chan  
Engineer

Date of Issue : 18 November 2014  
簽發日期

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室所書面批准。

Sun Creation Engineering Limited - Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗室

c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

Page 1 of 2

# Certificate of Calibration

## 校正證書

Certificate No. : C146966

證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
2. The results presented are the mean of 10 measurements at each calibration point.
3. Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL386	Multi-function Measuring Instrument	S12109

4. Test procedure : MA130N.

5. Results :

### Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.0	1.7	+0.3	0.2	2.0
4.1	3.8	+0.3	0.3	2.0
6.1	5.8	+0.3	0.3	2.0
8.0	7.8	+0.2	0.3	2.0
10.0	9.9	+0.1	0.4	2.0

Remarks : - The Measured Corrections are defined as :  
Value = Applied Value - UUT Reading

- The expanded uncertainties are for a level of confidence of 95 %.

### Note :

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室所書面批准。

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Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



## Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/011                      Manufacturer : HACH  
Model No. : 2100Q                                      Serial No. : 12060 C 018534  
Date of Calibration : 05/01/2015                      Due Date : 04/04/2015

Ref. No. of Turbidity Standard used (4000NTU)

005/6.1/001/7

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	19.8	-1.00
100	104	4.00
800	788	-1.50

(\* ) Difference = (Measured Value – Theoretical Value) / Theoretical Value x 100

Acceptance Criteria

Difference : -5 % to 5 %

The turbidity meter complies \* / ~~does not comply~~ \* with the specified requirements and is deemed acceptable \* / ~~unacceptable~~ \* for use. Measurements are traceable to national standards.

Prepared by : hy

Checked by : [Signature]





## Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/011                      Manufacturer : HACH  
Model No. : 2100Q                                      Serial No. : 12060 C 018534  
Date of Calibration : 02/04/2015                      Due Date : 01/07/2015

Ref. No. of Turbidity Standard used (4000NTU)

005/6.1/001/7

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	20.2	1.00
100	103	3.00
800	787	-1.63

(\*) Difference = (Measured Value – Theoretical Value) / Theoretical Value x 100

Acceptance Criteria

Difference : -5 % to 5 %

The turbidity meter complies \* / ~~does not comply~~ \* with the specified requirements and is deemed acceptable \* / ~~unacceptable~~ \* for use. Measurements are traceable to national standards.

Prepared by : 

Checked by : 

### Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/005                      Manufacturer : HANNA  
 Model No. : HI 8314                                      Serial No. : 8246095  
 Date of Calibration : 07/03/2015                      Calibration Due Date : 06/04/2015

#### Liquid Junction Error

Primary Standard Solution Used : Phosphate                      Ref No. of Primary Solution: 003/5.2/001/23  
 Temperature of Solution : 20.0                                       $\Delta\text{pH}_{\frac{1}{2}} = +0.08$   
 pH value of diluted buffer : 6.78                                      pH (S) = 6.881  
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.101}$                       (Observed Deviation)  
 Liquid Junction Error ( $\Delta\text{pH}_j$ ) =  $\Delta\text{pH} - \Delta\text{pH}_{\frac{1}{2}} = \underline{0.021}$

#### Shift on Stirring

pH of buffer solution (with stirring),  $\text{pH}_s = \underline{6.91}$   
 Shift on stirring,  $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{0.008}$

#### Noise

Noise,  $\Delta\text{pH}_n =$  difference between max and min reading : 0.00

#### Verification of ATC


Ref. No. of reference thermometer used: ET/0521/008  
 Temperature record from the reference thermometer ( $T_R$ ): 19.9 °C  
 Temperature record from the ATC ( $T_{ATC}$ ): 19.8 °C  
 Temperature Difference,  $|T_R - T_{ATC}|$  : 0.1 °C

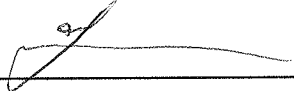
#### Acceptance Criteria

Performance Characteristic	Acceptable Range
Liquid Junction Error $\Delta\text{pH}_j$	$\leq 0.05$
Shift on Stirring $\Delta\text{pH}_s$	$\leq 0.02$
Noise $\Delta\text{pH}_n$	$\leq 0.02$
Verification of ATC                                      Temperature Difference	$\leq 0.5^\circ\text{C}$

The pH meter complies \* / does not comply \* with the specified requirements and is deemed acceptable \* / unacceptable \* for use. Measurements are traceable to national standards.

\* Delete as appropriate

Calibrated by : 

Checked by : 



### Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/005      Manufacturer : HANNA  
 Model No. : HI 8314      Serial No. : 8246095  
 Date of Calibration : 06/04/2015      Calibration Due Date : 05/05/2015

#### Liquid Junction Error

Primary Standard Solution Used : Phosphate      Ref No. of Primary Solution: 003/5.2/001/23  
 Temperature of Solution : 20.0       $\Delta\text{pH}_{1/2} = \underline{+0.08}$   
 pH value of diluted buffer : 6.76       $\text{pH (S)} = \underline{6.881}$   
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.121}$       (Observed Deviation)  
 Liquid Junction Error ( $\Delta\text{pH}_j$ ) =  $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.041}$

#### Shift on Stirring

pH of buffer solution (with stirring),  $\text{pH}_s = \underline{6.94}$   
 Shift on stirring,  $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{0.018}$

#### Noise

Noise,  $\Delta\text{pH}_n =$  difference between max and min reading : 0.00

#### Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008  
 Temperature record from the reference thermometer ( $T_R$ ): 19.9 °C  
 Temperature record from the ATC ( $T_{ATC}$ ): 19.6 °C  
 Temperature Difference,  $|T_R - T_{ATC}|$  : 0.3 °C

#### Acceptance Criteria

Performance Characteristic	Acceptable Range
Liquid Junction Error $\Delta\text{pH}_j$	$\leq 0.05$
Shift on Stirring $\Delta\text{pH}_s$	$\leq 0.02$
Noise $\Delta\text{pH}_n$	$\leq 0.02$
Verification of ATC      Temperature Difference	$\leq 0.5^\circ\text{C}$

The pH meter complies \* / does not comply \* with the specified requirements and is deemed acceptable \* / unacceptable \* for use. Measurements are traceable to national standards.

\* Delete as appropriate

Calibrated by : hy

Checked by : [Signature]



### Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No. : <u>ET/EW/008/006</u>	Manufacturer : <u>YSI</u>
Model No. : <u>Pro 2030</u>	Serial No. : <u>12A 100554</u>
Date of Calibration : <u>17/03/2015</u>	Calibration Due Date : <u>16/06/2015</u>

#### Temperature Verification

Ref. No. of Reference Thermometer : ET/0521/008

Ref. No. of Water Bath : ---

Reference Thermometer reading	Temperature (°C)			
	Measured	20.0	Corrected	19.4
DO Meter reading	Measured	19.2	Difference	0.2

#### Standardization of sodium thiosulphate ( $Na_2S_2O_3$ ) solution

Reagent No. of $Na_2S_2O_3$ titrant	CPE/012/4.5/001/11	Reagent No. of 0.025N $K_2Cr_2O_7$	CPE/012/4.4/001/35
		Trial 1	Trial 2
Initial Vol. of $Na_2S_2O_3$ (ml)		0.00	10.15
Final Vol. of $Na_2S_2O_3$ (ml)		10.15	20.40
Vol. of $Na_2S_2O_3$ used (ml)		10.15	10.25
Normality of $Na_2S_2O_3$ solution (N)		0.02463	0.02439
Average Normality (N) of $Na_2S_2O_3$ solution (N)		0.02451	
Acceptance criteria, Deviation		Less than $\pm 0.001N$	

Calculation: Normality of  $Na_2S_2O_3$ ,  $N = 0.25 / ml Na_2S_2O_3$  used

#### Linearity Checking

##### Determination of dissolved oxygen content by Winkler Titration \*

Purging Time (min)	2		5		10	
	1	2	1	2	1	2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	11.20	22.60	0.00	6.80	10.40
Final Vol. of $Na_2S_2O_3$ (ml)	11.20	22.60	29.20	6.80	10.40	14.10
Vol. (V) of $Na_2S_2O_3$ used (ml)	11.20	11.40	6.60	6.80	3.60	3.70
Dissolved Oxygen (DO), mg/L	7.37	7.50	4.34	4.47	2.37	2.43
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation:  $DO (mg/L) = V \times N \times 8000/298$

Purging time, min	DO meter reading, mg/L			Winkler Titration result *, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.42	7.90	7.66	7.37	7.50	7.44	2.91
5	4.38	4.10	4.24	4.34	4.47	4.41	3.93
10	2.50	2.48	2.49	2.37	2.43	2.40	3.68
Linear regression coefficient				0.9954			



### Internal Calibration Report of Dissolved Oxygen Meter

*Zero Point Checking*

DO meter reading, mg/L	0.00
------------------------	------

*Salinity Checking*

Reagent No. of NaCl (10ppt)	CPE/012/4.7/002/34	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/34
-----------------------------	--------------------	-----------------------------	--------------------

*Determination of dissolved oxygen content by Winkler Titration \*\**

Salinity (ppt)	10		30	
	1	2	1	2
Trial				
Initial Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (ml)	0.00	11.90	23.50	34.00
Final Vol. of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (ml)	11.90	23.50	34.00	44.30
Vol. (V) of Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> used (ml)	11.90	11.60	10.50	10.30
Dissolved Oxygen (DO), mg/L	7.83	7.63	6.91	6.78
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation:  $DO\ (mg/L) = V \times N \times 8000/298$

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result**, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	7.20	7.65	7.43	7.83	7.63	7.73	3.96
30	6.90	6.40	6.65	6.91	6.78	6.85	2.96

*Acceptance Criteria*

- (1) Difference between temperature readings from temperature sensor of DO probe and reference thermometer : < 0.5 °C
- (2) Linear regression coefficient : >0.99
- (3) Zero checking: 0.0mg/L
- (4) Difference (%) of DO content from the meter reading and by winkler titration : within ± 5%

The equipment complies # / does not comply # with the specified requirements and is deemed acceptable # / unacceptable # for use.

# Delete as appropriate

Calibrated by : \_\_\_\_\_ \_\_\_\_\_

Approved by : \_\_\_\_\_ \_\_\_\_\_



## Performance Check of Salinity Meter

Equipment Ref. No. : ET/EW/008/006      Manufacturer : YSI  
Model No. : Pro 2030      Serial No. : 12A 100554  
Date of Calibration : 17/03/2015      Due Date : 16/06/2015

Ref. No. of Salinity Standard used (30ppt)

S/001/5

Salinity Standard (ppt)	Measured Salinity (ppt)	Difference %
30.0	30.3	1.0

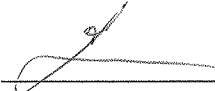
(\*) Difference (%) = (Measured Salinity – Salinity Standard value) / Salinity Standard value x 100

Acceptance Criteria

Difference : -10 % to 10 %

The salinity meter complies \* / ~~does not comply~~ \* with the specified requirements and is deemed acceptable \* / ~~unacceptable~~ \* for use. Measurements are traceable to national standards.

Checked by : 

Approved by : 

Appendix F

## EM&A Monitoring Schedules

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link  
Northern Connection Sub-sea Tunnel Section  
Air Quality Impact Monitoring Schedule - April 2015**

Air quality monitoring stations: ASR1, ASR5, ASR6, ASR10, AQMS1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Apr	02-Apr	public holiday 03-Apr	04-Apr
					1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM	
05-Apr	public holiday 06-Apr	public holiday 07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
	1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM		
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
		1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM	
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr		
	1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM		

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.



**HY/2012/08 - Tuen Mun - Chek Lap Kok Link  
Northern Connection Sub-sea Tunnel Section  
Tentative Air Quality Impact Monitoring Schedule - May 2015**

Air quality monitoring stations: ASR1, ASR5, ASR6, ASR10, AQMS1

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					public holiday 01-May	02-May
03-May	04-May	05-May	06-May	07-May	08-May	09-May
1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM
10-May	11-May	12-May	13-May	14-May	15-May	16-May
		1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM	
17-May	18-May	19-May	20-May	21-May	22-May	23-May
1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM				1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM		
24-May	public holiday 25-May	26-May	27-May	28-May	29-May	30-May
1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM			1-hour TSP - 3 times 24-hour TSP - 1 time  Impact AQM
31-May						

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section  
Impact Marine Water Quality Monitoring (WQM) Schedule (April 15)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Apr	02-Apr	03-Apr	04-Apr
			<b>WQM</b> Mid-Ebb 12:00 (10:15 - 13:45) Mid-Flood 17:26 (15:41 - 19:11)		<b>WQM</b> Mid-Ebb 12:35 (10:50 - 14:20) Mid-Flood 18:42 (16:57 - 20:27)	
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
	<b>WQM</b> Mid-Ebb 14:01 (12:16 - 15:46) Mid-Flood 20:28 (18:43 - 22:13)		<b>WQM</b> Mid-Flood 8:41 (06:56 - 10:26) Mid-Ebb 15:11 (13:26 - 16:56)		<b>WQM</b> Mid-Flood 9:44 (07:59 - 11:29) Mid-Ebb 16:40 (14:55 - 18:25)	
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
	<b>WQM</b> Mid-Flood 13:12 (11:27 - 14:57) Mid-Ebb 20:14 (18:29 - 21:59)		<b>WQM</b> Mid-Ebb 10:38 (08:53 - 12:23) Mid-Flood 16:04 (14:19 - 17:49)		<b>WQM</b> Mid-Ebb 12:00 (10:15 - 13:45) Mid-Flood 18:01 (16:16 - 19:46)	
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
	<b>WQM</b> Mid-Ebb 14:04 (12:19 - 15:49) Mid-Flood 20:41 (18:56 - 22:26)		<b>WQM</b> Mid-Flood 8:38 (06:53 - 10:23) Mid-Ebb 15:31 (13:46 - 17:16)		<b>WQM</b> Mid-Flood 9:47 (08:02 - 11:32) Mid-Ebb 17:02 (15:17 - 18:47)	
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr	01-May	02-May
	<b>WQM</b> Mid-Flood 13:22 (11:37 - 15:07) Mid-Ebb 20:22 (18:37 - 22:07)		<b>WQM</b> Mid-Ebb 10:39 (08:54 - 12:24) Mid-Flood 16:18 (14:33 - 18:03)		<b>WQM</b> Mid-Ebb 11:41 (09:56 - 13:26) Mid-Flood 17:51 (16:06 - 19:36)	

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section  
Tentative Impact Marine Water Quality Monitoring (WQM) Schedule (May 15)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-May	02-May
					<b>WQM</b> Mid-Ebb 11:41 (09:56 - 13:26) Mid-Flood 17:51 (16:06 - 19:36)	
03-May	04-May	05-May	06-May	07-May	08-May	09-May
	<b>WQM</b> Mid-Ebb 13:11 (11:26 - 14:56) Mid-Flood 19:48 (18:03 - 21:33)		<b>WQM</b> Mid-Flood 7:40 (05:55 - 09:25) Mid-Ebb 14:19 (12:34 - 16:04)		<b>WQM</b> Mid-Flood 8:48 (07:03 - 10:33) Mid-Ebb 15:41 (13:56 - 17:26)	
10-May	11-May	12-May	13-May	14-May	15-May	16-May
	<b>WQM</b> Mid-Flood 11:23 (09:38 - 13:08) Mid-Ebb 18:27 (18:29 - 21:59)		<b>WQM</b> Mid-Ebb 9:20 (07:35 - 11:05) Mid-Flood 14:40 (12:55 - 16:25)		<b>WQM</b> Mid-Ebb 10:58 (09:13 - 12:43) Mid-Flood 16:59 (15:14 - 18:44)	
17-May	18-May	19-May	20-May	21-May	22-May	23-May
	<b>WQM</b> Mid-Ebb 13:08 (11:23 - 14:53) Mid-Flood 19:51 (18:06 - 21:36)		<b>WQM</b> Mid-Flood 7:35 (05:50 - 09:20) Mid-Ebb 14:32 (12:47 - 16:17)		<b>WQM</b> Mid-Flood 8:46 (07:01 - 10:31) Mid-Ebb 15:54 (14:09 - 17:39)	
24-May	25-May	26-May	27-May	28-May	29-May	30-May
	<b>WQM</b> Mid-Flood 10:57 (09:12 - 12:42) Mid-Flood 18:07 (16:22 - 19:52)		<b>WQM</b> Mid-Ebb 9:02 (07:17 - 10:47) Mid-Flood 14:15 (12:30 - 16:00)		<b>WQM</b> Mid-Ebb 10:38 (08:53 - 12:23) Mid-Flood 16:45 (15:00 - 18:30)	

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link  
Northern Connection Sub-sea Tunnel Section  
Impact Dolphin Monitoring Survey Monitoring Schedule - April 2015**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
			01-Apr	02-Apr	public holiday	03-Apr	public holiday	04-Apr
05-Apr	public holiday	06-Apr	public holiday	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
			Impact Dolphin Monitoring			Impact Dolphin Monitoring		
12-Apr		13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr	
						Impact Dolphin Monitoring		
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr		
			Impact Dolphin Monitoring					
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr				

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link  
Northern Connection Sub-sea Tunnel Section  
Tentative Impact Dolphin Monitoring Survey Monitoring Schedule - May 2015**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					public holiday	1-May
						2-May
3-May	4-May	5-May	6-May	7-May	8-May	9-May
	Impact Dolphin Monitoring				Impact Dolphin Monitoring	
10-May	11-May	12-May	13-May	14-May	15-May	16-May
				Impact Dolphin Monitoring		
17-May	18-May	19-May	20-May	21-May	22-May	23-May
				Impact Dolphin Monitoring		
24-May	public holiday	25-May	26-May	27-May	28-May	29-May
						30-May
31-May						

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

Appendix G

## Impact Air Quality Monitoring Results

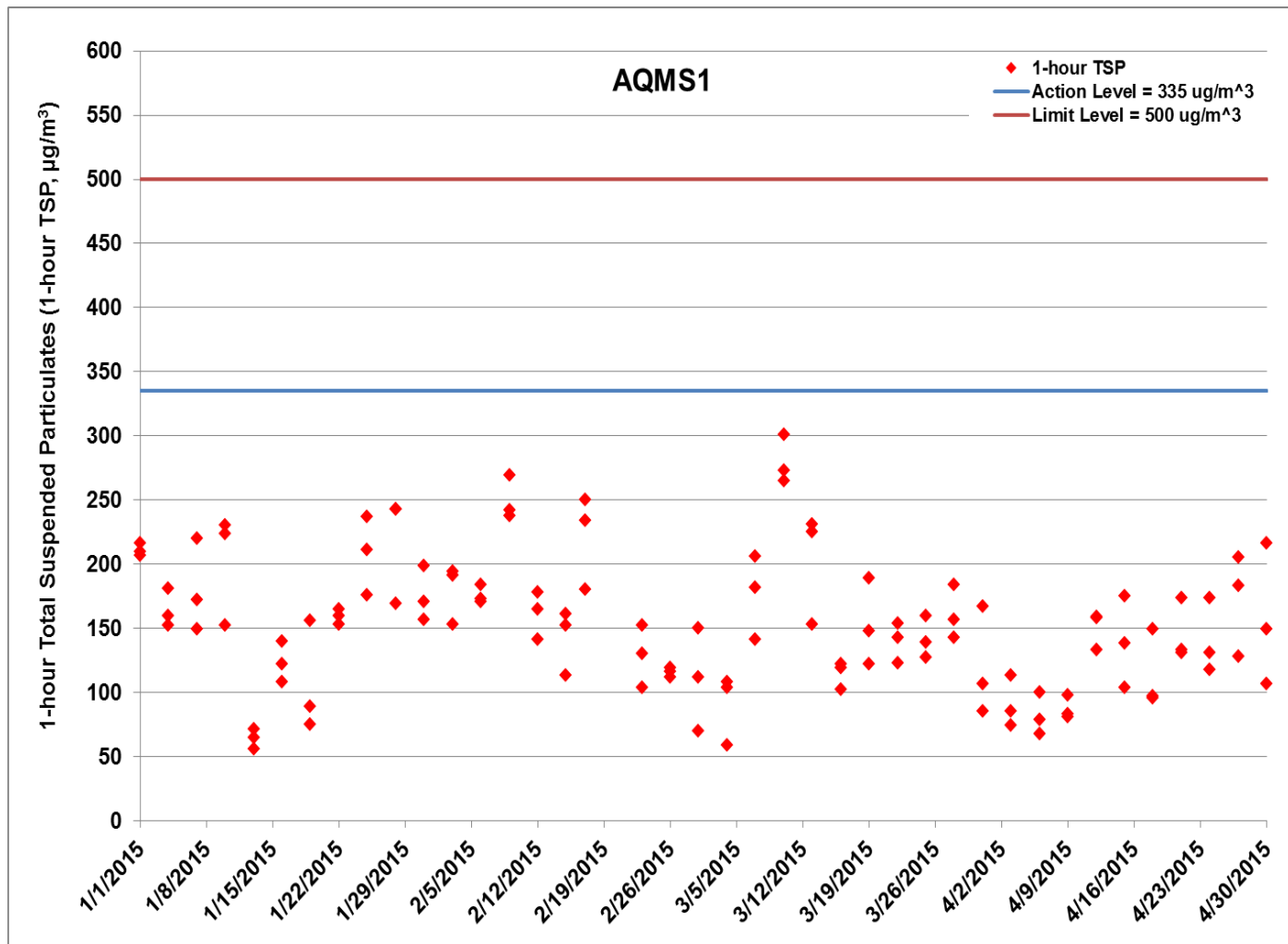


Figure G.1 Impact Monitoring – 1-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at AQMS1 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 – 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 – 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 – 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx



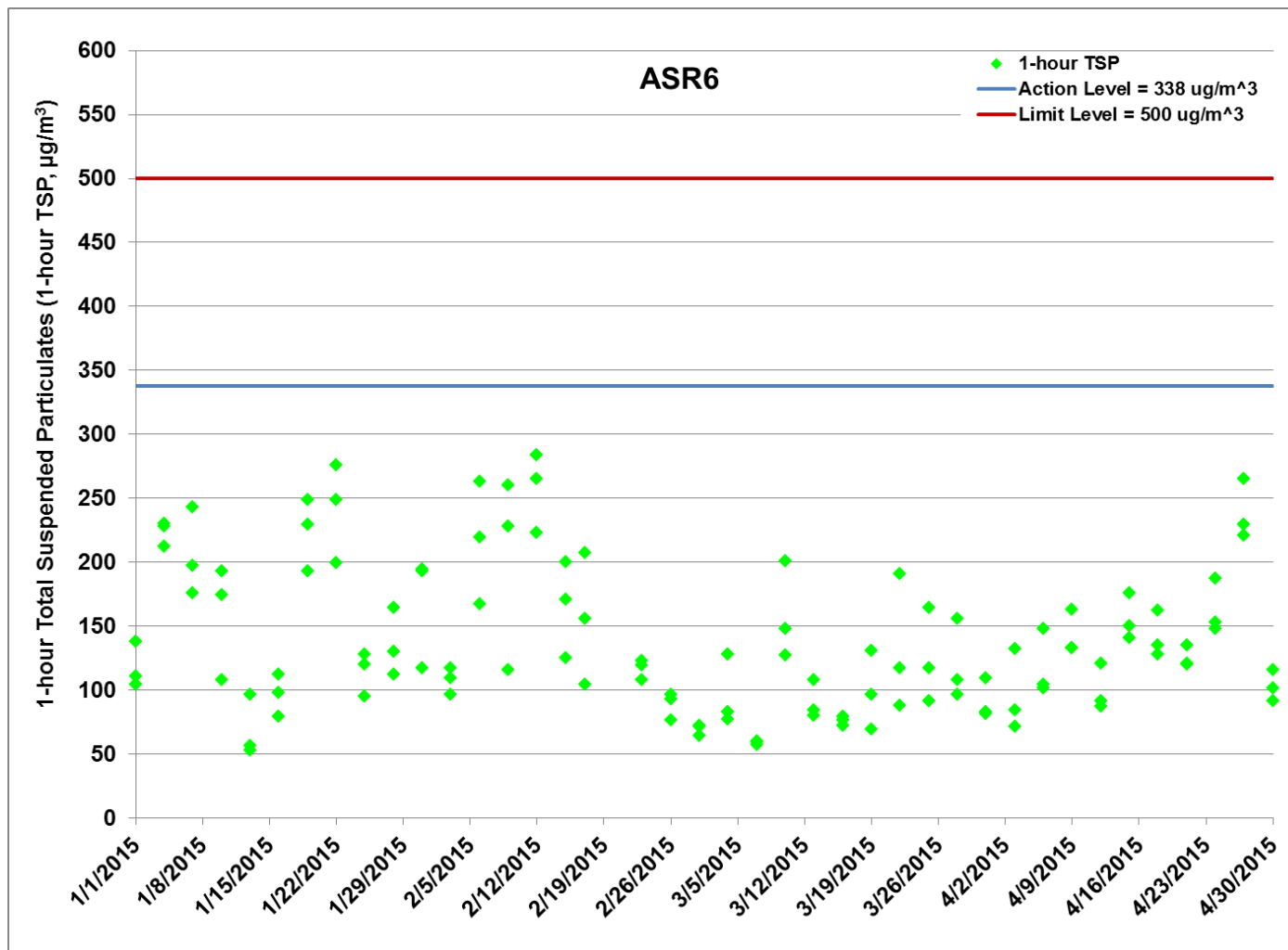


Figure G.2 Impact Monitoring - 1-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at ASR6 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx





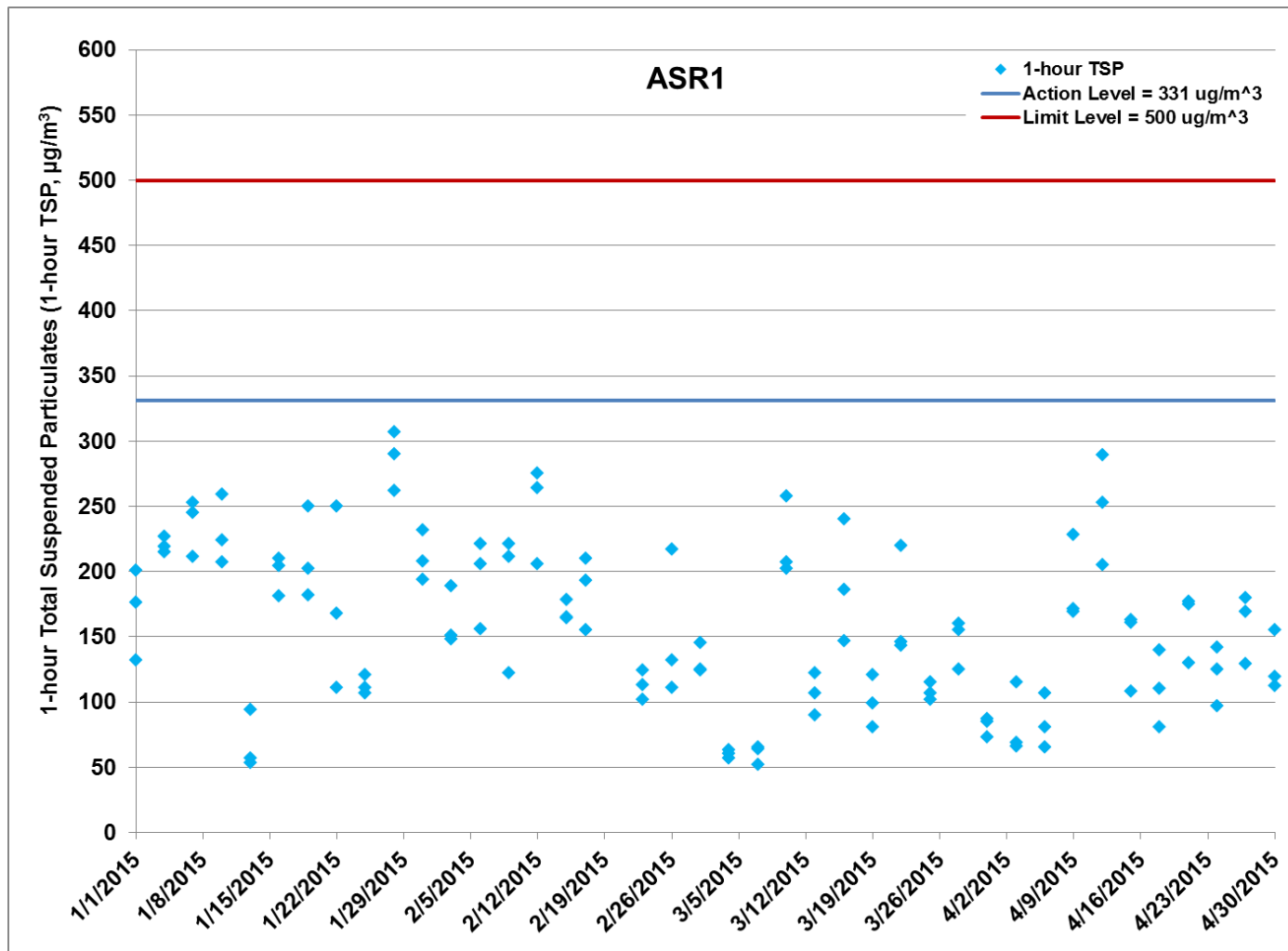


Figure G.3 Impact Monitoring - 1-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at ASR1 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx



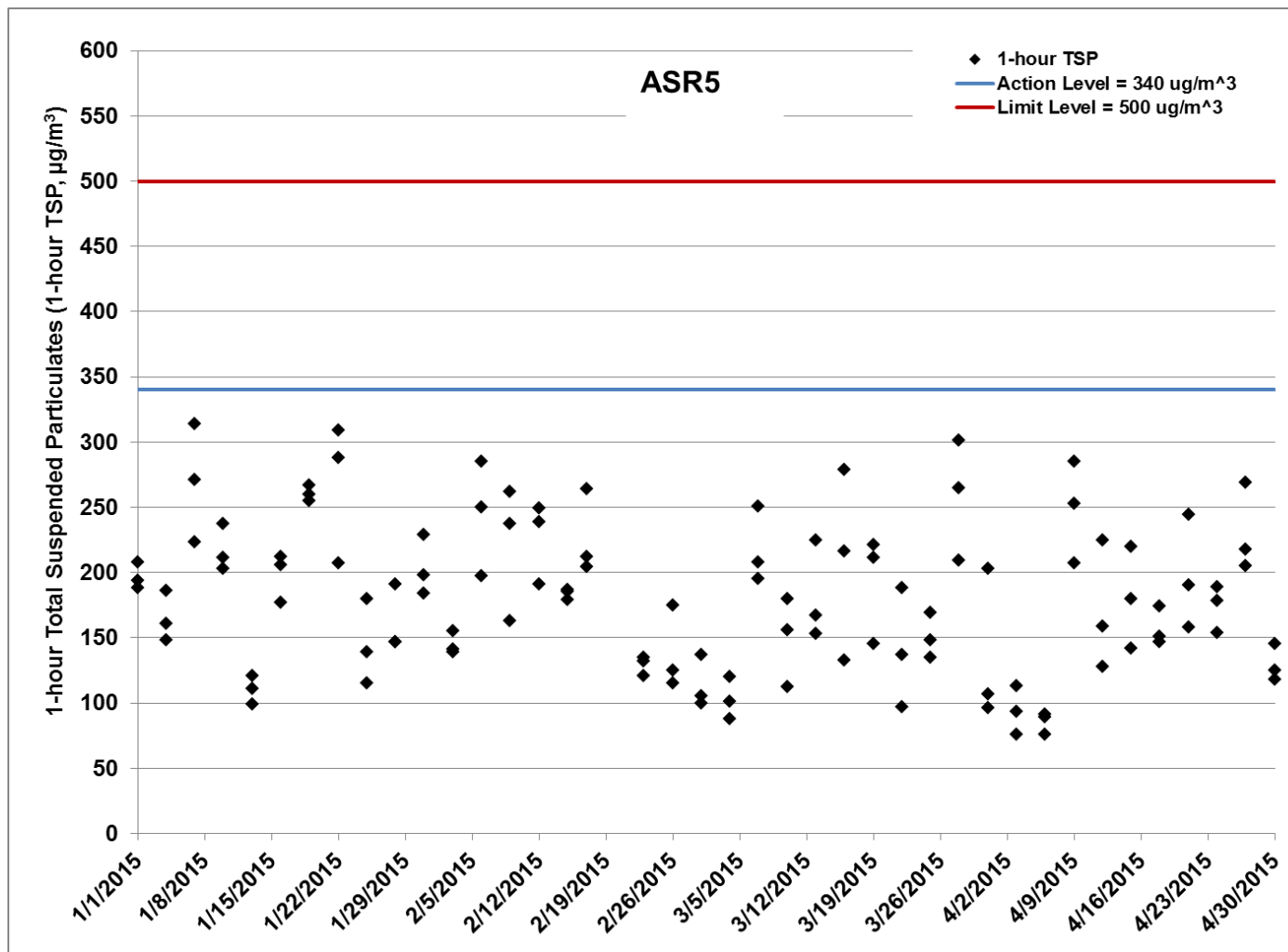
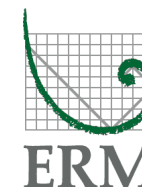


Figure G.4 Impact Monitoring - 1-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at ASR5 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx



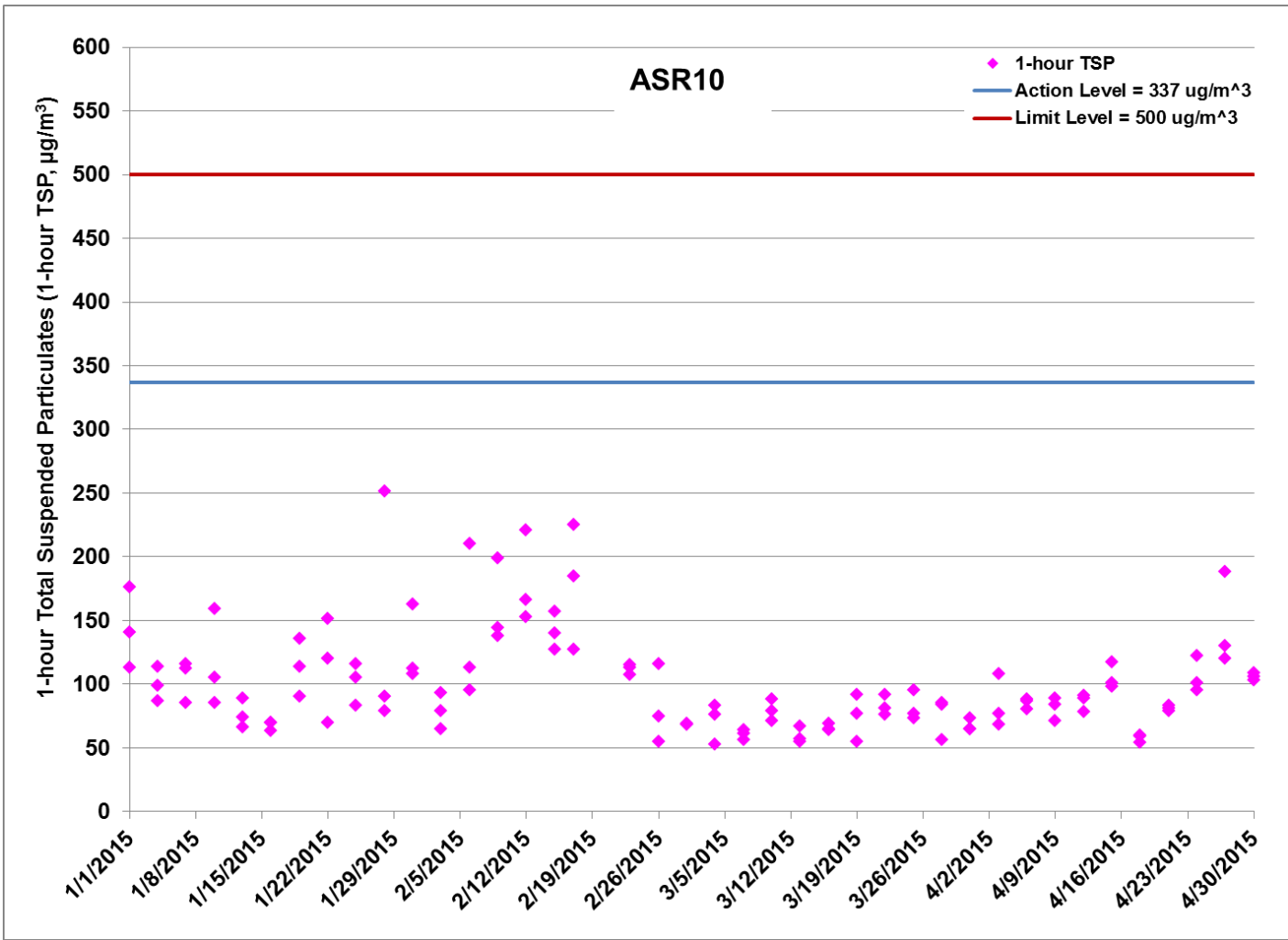


Figure G.5 Impact Monitoring - 1-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at ASR10 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx



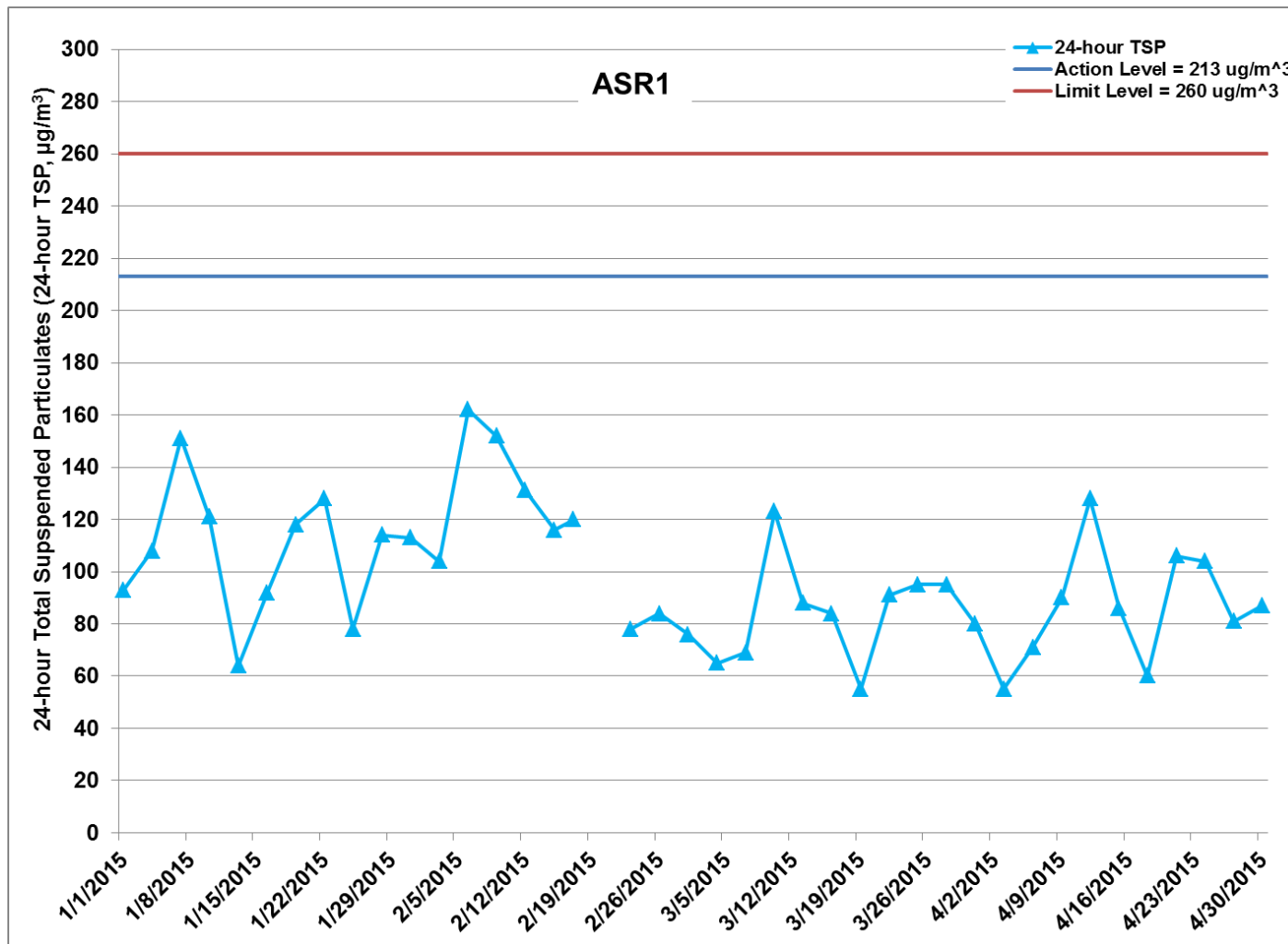


Figure G.6 Impact Monitoring - 24-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at ASR1 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx



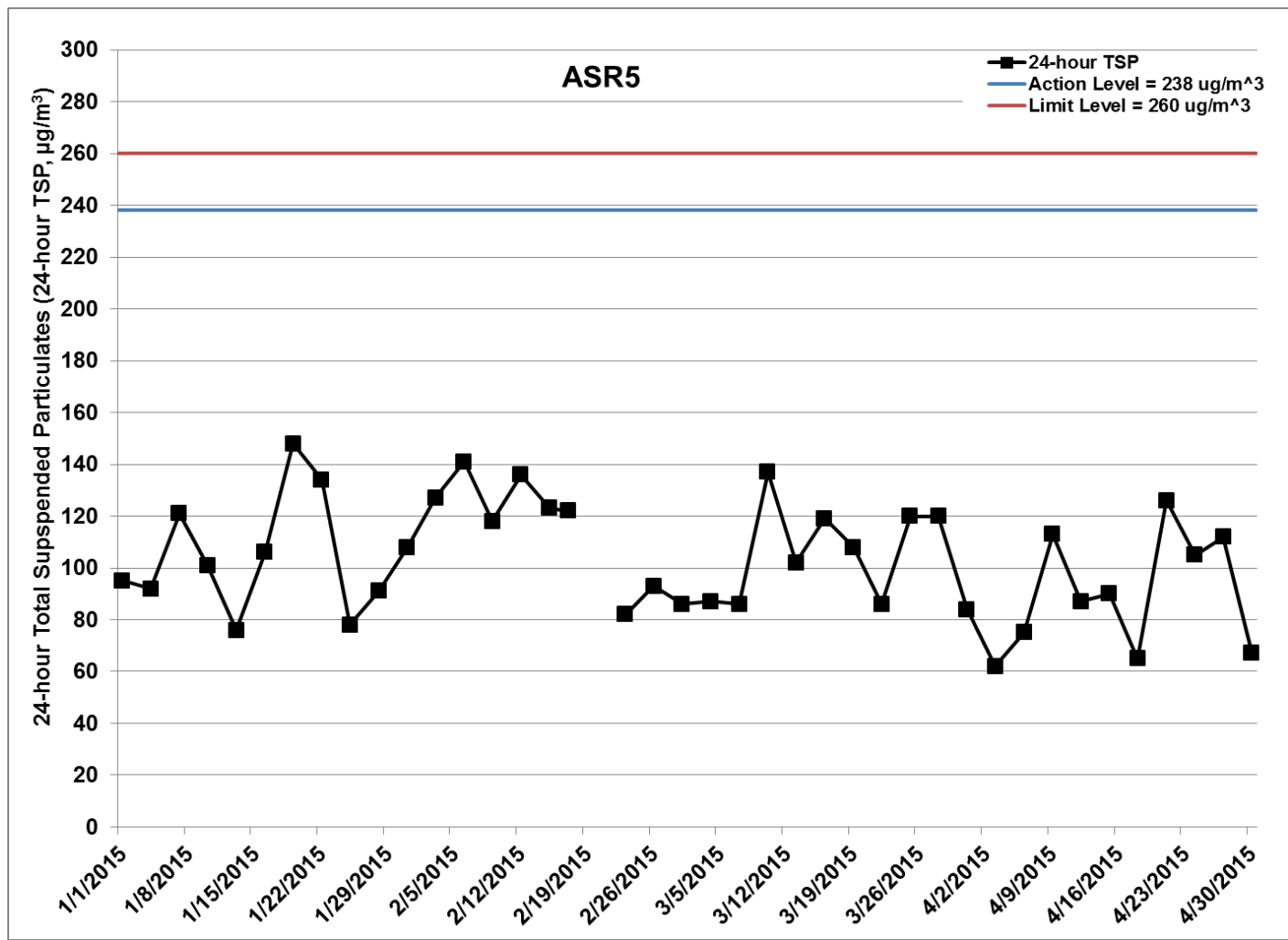


Figure G.7 Impact Monitoring - 24-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at ASR5 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx



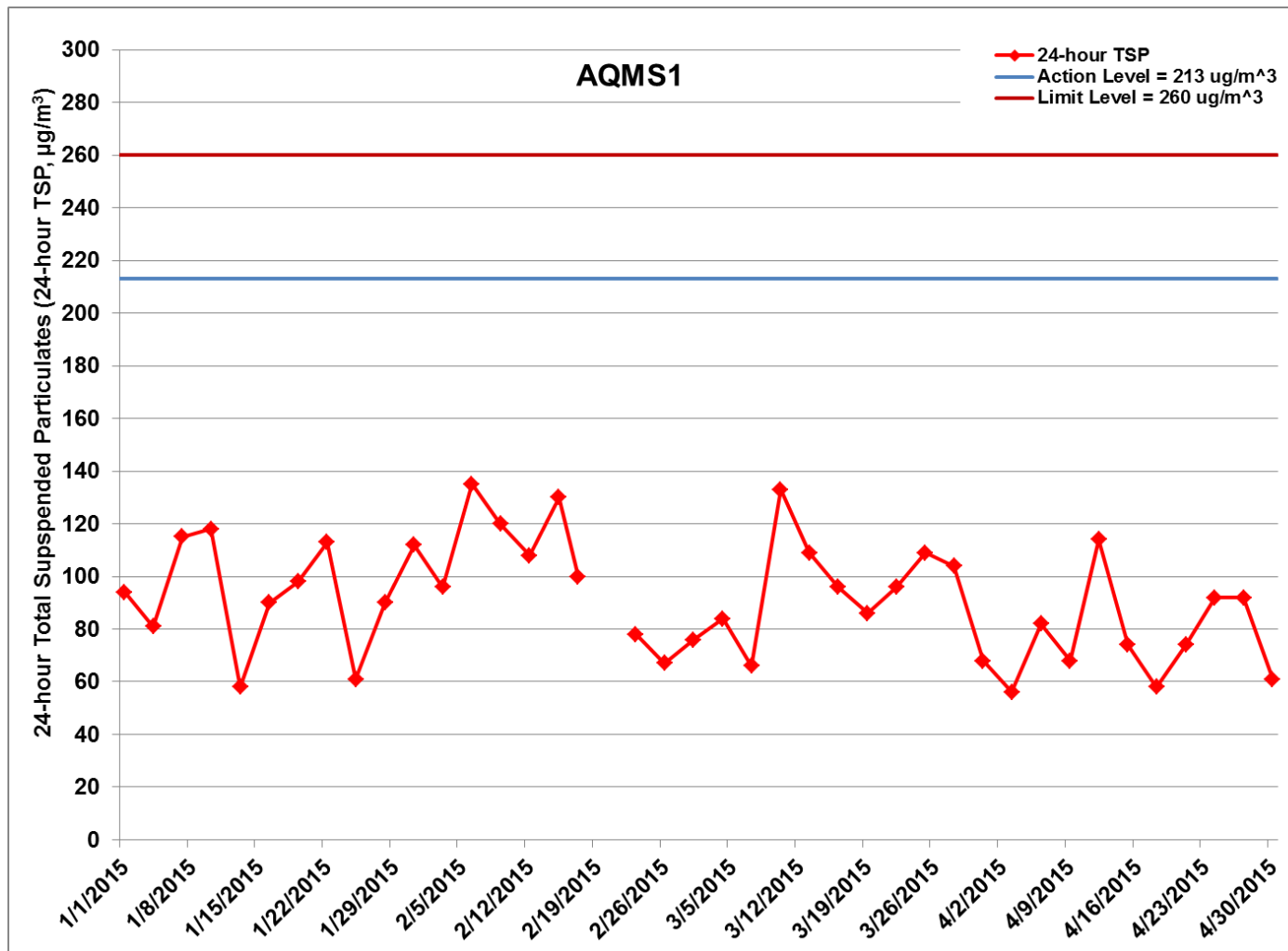


Figure G.8 Impact Monitoring - 24-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at AQMS1 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx



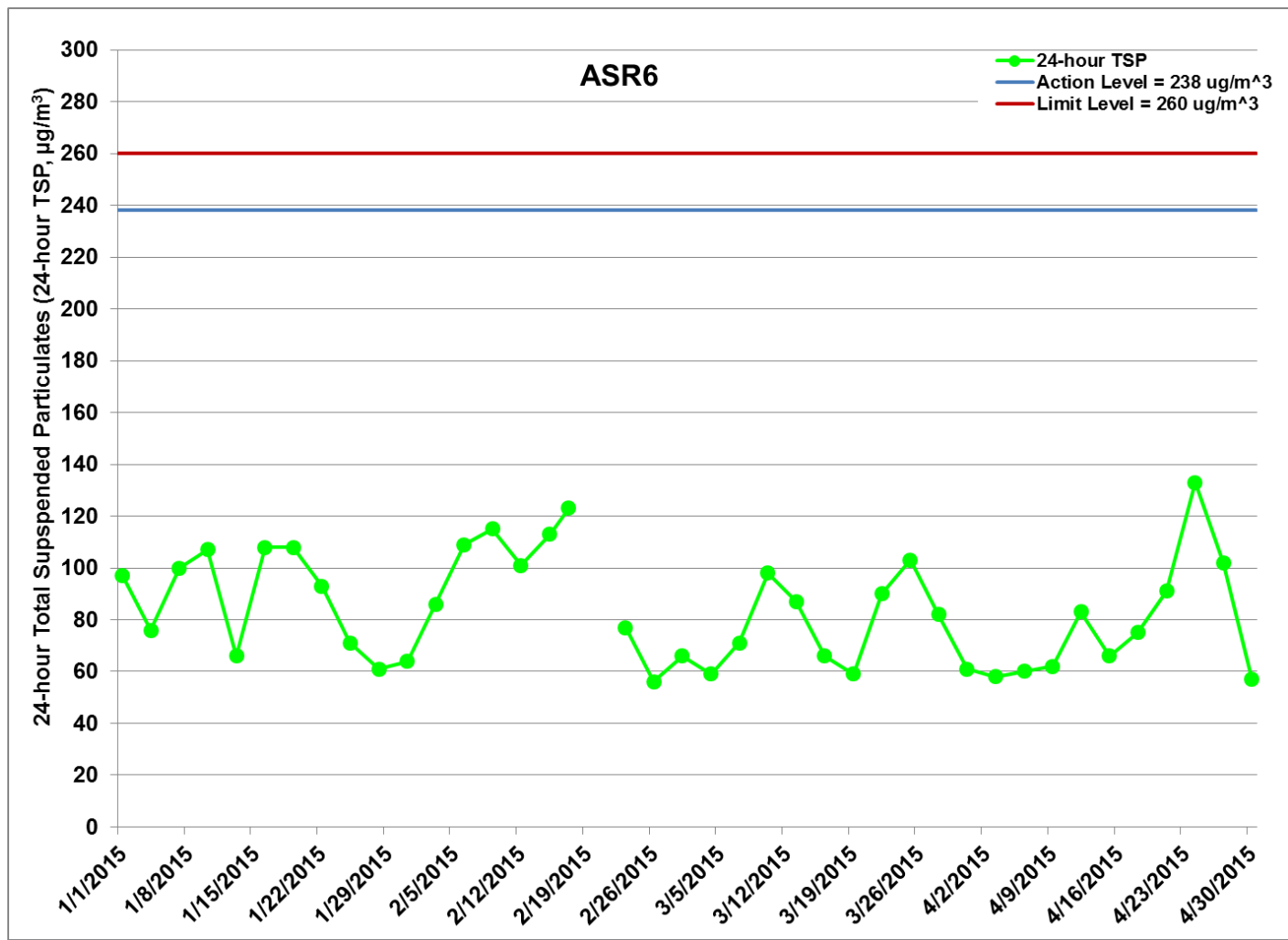


Figure G.9 Impact Monitoring - 24-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at ASR6 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx



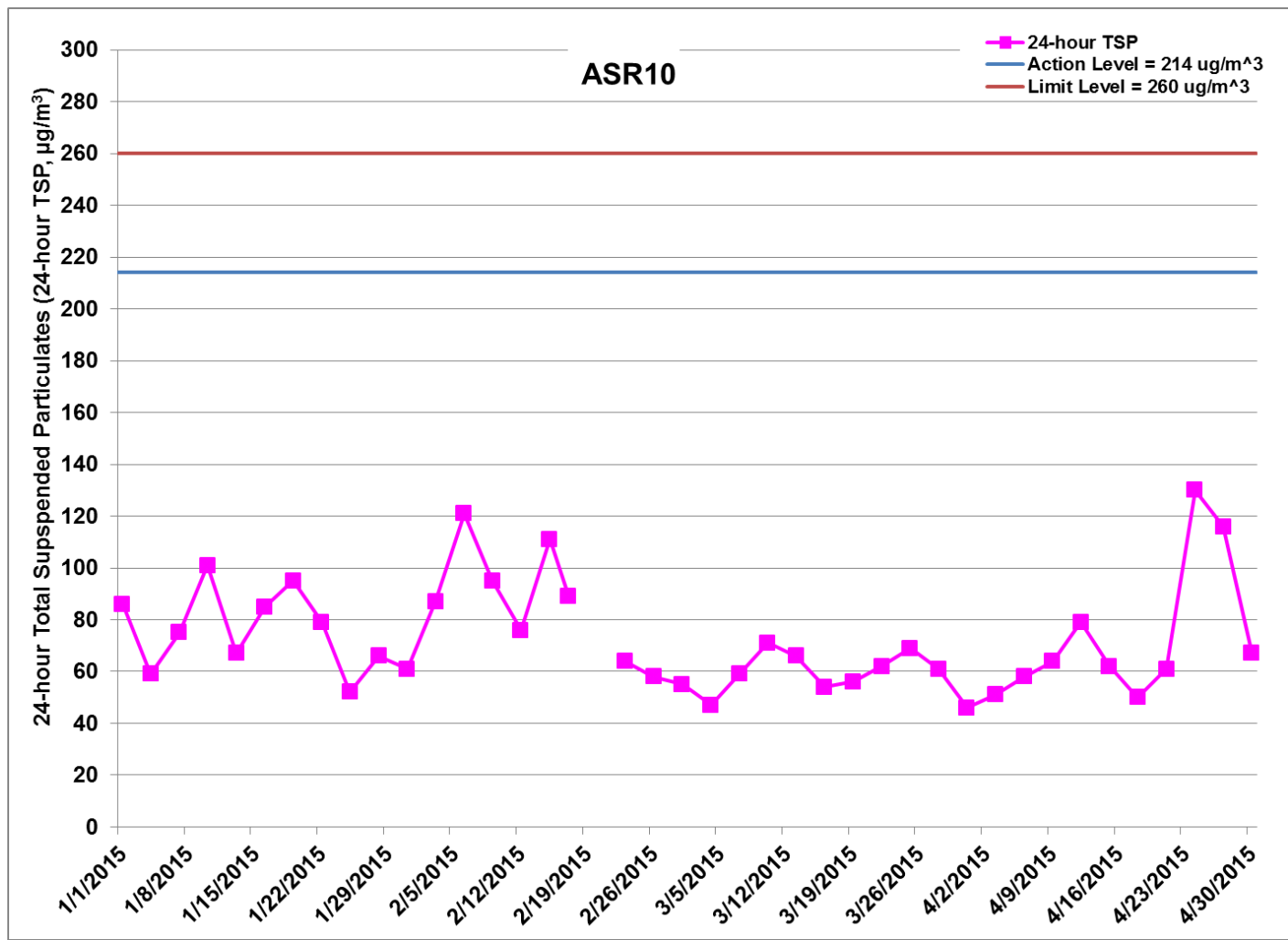


Figure G.10 Impact Monitoring - 24-hour Total Suspended Particulates ( $\mu\text{g}/\text{m}^3$ ) at ASR10 between 1 January 2015 and 30 April 2015 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: TBM Platform Construction at Works Area - Portion N-A (1/1/2015 - 31/3/2015), Diaphragm Wall Construction for Ventilation Shaft at Works Area - Portion N-C (1/1/2015 - 30/4/2015) and Setting up of Slurry Treatment Plant (1/1/2015 - 30/4/2015). Ref: 0212330\_Impact AQM graphs\_Apr 2015\_REV a.xlsx





Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2015-04-03	AQMS1	Cloudy	08:45	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2015-04-03	AQMS1	Cloudy	09:47	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2015-04-03	AQMS1	Cloudy	10:49	1-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR1	Cloudy	08:33	1-hour TSP	115	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR1	Cloudy	09:35	1-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR1	Cloudy	10:37	1-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR5	Cloudy	08:22	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR5	Cloudy	09:24	1-hour TSP	76	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR5	Cloudy	10:26	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR6	Cloudy	08:11	1-hour TSP	132	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR6	Cloudy	09:13	1-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR6	Cloudy	10:15	1-hour TSP	84	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR10	Cloudy	08:02	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR10	Cloudy	09:04	1-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR10	Cloudy	10:06	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR10	Sunny	12:17	1-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR10	Sunny	13:19	1-hour TSP	80	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR10	Sunny	14:21	1-hour TSP	88	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR6	Sunny	12:27	1-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR6	Sunny	13:29	1-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR6	Sunny	14:31	1-hour TSP	148	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR5	Sunny	12:38	1-hour TSP	76	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR5	Sunny	13:40	1-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR5	Sunny	14:42	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR1	Sunny	12:50	1-hour TSP	65	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR1	Sunny	13:52	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR1	Sunny	14:54	1-hour TSP	107	ug/m3
TMCLKL	HY/2012/08	2015-04-06	AQMS1	Sunny	13:02	1-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2015-04-06	AQMS1	Sunny	14:04	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2015-04-06	AQMS1	Sunny	15:06	1-hour TSP	100	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2015-04-09	AQMS1	Cloudy	13:06	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2015-04-09	AQMS1	Cloudy	14:08	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2015-04-09	AQMS1	Cloudy	15:10	1-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR1	Cloudy	12:55	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR1	Cloudy	13:57	1-hour TSP	171	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR1	Cloudy	14:59	1-hour TSP	228	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR5	Cloudy	12:44	1-hour TSP	285	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR5	Cloudy	13:46	1-hour TSP	253	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR5	Cloudy	14:48	1-hour TSP	207	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR6	Cloudy	12:32	1-hour TSP	133	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR6	Cloudy	13:34	1-hour TSP	133	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR6	Cloudy	14:36	1-hour TSP	163	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR10	Cloudy	12:22	1-hour TSP	84	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR10	Cloudy	13:24	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR10	Cloudy	14:26	1-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2015-04-12	AQMS1	Sunny	15:00	1-hour TSP	133	ug/m3
TMCLKL	HY/2012/08	2015-04-12	AQMS1	Sunny	16:02	1-hour TSP	159	ug/m3
TMCLKL	HY/2012/08	2015-04-12	AQMS1	Sunny	17:04	1-hour TSP	158	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR1	Sunny	09:00	1-hour TSP	205	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR1	Sunny	10:02	1-hour TSP	289	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR1	Sunny	11:04	1-hour TSP	253	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR5	Sunny	08:49	1-hour TSP	225	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR5	Sunny	09:51	1-hour TSP	159	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR5	Sunny	10:53	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR6	Sunny	08:37	1-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR6	Sunny	09:39	1-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR6	Sunny	10:41	1-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR10	Sunny	08:27	1-hour TSP	78	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR10	Sunny	09:29	1-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR10	Sunny	10:31	1-hour TSP	89	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2015-04-15	AQMS1	Sunny	08:45	1-hour TSP	138	ug/m3
TMCLKL	HY/2012/08	2015-04-15	AQMS1	Sunny	09:47	1-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2015-04-15	AQMS1	Sunny	10:49	1-hour TSP	175	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR1	Sunny	08:33	1-hour TSP	161	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR1	Sunny	09:35	1-hour TSP	163	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR1	Sunny	10:37	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR5	Sunny	08:22	1-hour TSP	180	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR5	Sunny	09:24	1-hour TSP	220	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR5	Sunny	10:26	1-hour TSP	142	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR6	Sunny	08:10	1-hour TSP	176	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR6	Sunny	09:12	1-hour TSP	150	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR6	Sunny	10:14	1-hour TSP	141	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR10	Sunny	08:00	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR10	Sunny	09:02	1-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR10	Sunny	10:04	1-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2015-04-18	AQMS1	Sunny	13:40	1-hour TSP	149	ug/m3
TMCLKL	HY/2012/08	2015-04-18	AQMS1	Sunny	14:42	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2015-04-18	AQMS1	Sunny	15:44	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR1	Sunny	13:29	1-hour TSP	140	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR1	Sunny	14:31	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR1	Sunny	15:33	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR5	Sunny	13:17	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR5	Sunny	14:19	1-hour TSP	151	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR5	Sunny	15:21	1-hour TSP	147	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR6	Sunny	13:06	1-hour TSP	162	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR6	Sunny	14:08	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR6	Sunny	15:10	1-hour TSP	135	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR10	Sunny	12:55	1-hour TSP	59	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR10	Sunny	13:57	1-hour TSP	54	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR10	Sunny	14:59	1-hour TSP	60	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2015-04-21	ASR10	Sunny	08:00	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR10	Sunny	09:02	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR10	Sunny	10:04	1-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR6	Sunny	08:12	1-hour TSP	120	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR6	Sunny	09:14	1-hour TSP	135	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR6	Sunny	10:16	1-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR5	Sunny	08:23	1-hour TSP	244	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR5	Sunny	09:25	1-hour TSP	190	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR5	Sunny	10:27	1-hour TSP	158	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR1	Sunny	08:35	1-hour TSP	177	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR1	Sunny	09:37	1-hour TSP	175	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR1	Sunny	10:39	1-hour TSP	130	ug/m3
TMCLKL	HY/2012/08	2015-04-21	AQMS1	Sunny	08:46	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2015-04-21	AQMS1	Sunny	09:48	1-hour TSP	133	ug/m3
TMCLKL	HY/2012/08	2015-04-21	AQMS1	Sunny	10:50	1-hour TSP	131	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR1	Cloudy	09:10	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR1	Cloudy	10:12	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR1	Cloudy	11:14	1-hour TSP	142	ug/m3
TMCLKL	HY/2012/08	2015-04-24	AQMS1	Cloudy	09:21	1-hour TSP	131	ug/m3
TMCLKL	HY/2012/08	2015-04-24	AQMS1	Cloudy	10:23	1-hour TSP	118	ug/m3
TMCLKL	HY/2012/08	2015-04-24	AQMS1	Cloudy	11:25	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR5	Cloudy	08:58	1-hour TSP	178	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR5	Cloudy	10:00	1-hour TSP	154	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR5	Cloudy	11:02	1-hour TSP	189	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR6	Cloudy	08:47	1-hour TSP	148	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR6	Cloudy	09:49	1-hour TSP	153	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR6	Cloudy	10:51	1-hour TSP	187	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR10	Cloudy	08:36	1-hour TSP	122	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR10	Cloudy	09:38	1-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR10	Cloudy	10:40	1-hour TSP	101	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2015-04-27	ASR10	Sunny	14:17	1-hour TSP	130	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR10	Sunny	15:19	1-hour TSP	120	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR10	Sunny	16:21	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2015-04-27	AQMS1	Sunny	15:01	1-hour TSP	205	ug/m3
TMCLKL	HY/2012/08	2015-04-27	AQMS1	Sunny	16:03	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2015-04-27	AQMS1	Sunny	17:05	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR1	Sunny	14:50	1-hour TSP	180	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR1	Sunny	15:52	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR1	Sunny	16:54	1-hour TSP	129	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR5	Sunny	14:39	1-hour TSP	218	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR5	Sunny	15:41	1-hour TSP	205	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR5	Sunny	16:43	1-hour TSP	269	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR6	Sunny	14:27	1-hour TSP	221	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR6	Sunny	15:29	1-hour TSP	265	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR6	Sunny	16:31	1-hour TSP	229	ug/m3
TMCLKL	HY/2012/08	2015-04-30	AQMS1	Sunny	15:02	1-hour TSP	149	ug/m3
TMCLKL	HY/2012/08	2015-04-30	AQMS1	Sunny	16:04	1-hour TSP	216	ug/m3
TMCLKL	HY/2012/08	2015-04-30	AQMS1	Sunny	17:06	1-hour TSP	107	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR1	Sunny	14:49	1-hour TSP	155	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR1	Sunny	15:51	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR1	Sunny	16:53	1-hour TSP	119	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR5	Sunny	14:37	1-hour TSP	118	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR5	Sunny	15:39	1-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR5	Sunny	16:41	1-hour TSP	145	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR6	Sunny	14:26	1-hour TSP	116	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR6	Sunny	15:30	1-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR6	Sunny	16:32	1-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR10	Sunny	14:16	1-hour TSP	103	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR10	Sunny	15:18	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR10	Sunny	16:20	1-hour TSP	109	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2015-04-03	AQMS1	Cloudy	11:51	24-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR1	Cloudy	11:39	24-hour TSP	55	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR5	Cloudy	11:28	24-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR6	Cloudy	11:17	24-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2015-04-03	ASR10	Cloudy	11:08	24-hour TSP	51	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR10	Sunny	15:23	24-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR6	Sunny	15:33	24-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR5	Sunny	15:44	24-hour TSP	75	ug/m3
TMCLKL	HY/2012/08	2015-04-06	ASR1	Sunny	15:56	24-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2015-04-06	AQMS1	Sunny	16:08	24-hour TSP	82	ug/m3
TMCLKL	HY/2012/08	2015-04-09	AQMS1	Cloudy	16:12	24-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR1	Cloudy	16:01	24-hour TSP	90	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR5	Cloudy	15:50	24-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR6	Cloudy	15:38	24-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2015-04-09	ASR10	Cloudy	15:28	24-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	2015-04-12	AQMS1	Sunny	18:06	24-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR1	Sunny	12:06	24-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR5	Sunny	11:55	24-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR6	Sunny	11:43	24-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2015-04-12	ASR10	Sunny	11:33	24-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2015-04-15	AQMS1	Sunny	11:51	24-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR1	Sunny	11:39	24-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR5	Sunny	11:28	24-hour TSP	90	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR6	Sunny	11:16	24-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2015-04-15	ASR10	Sunny	11:06	24-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2015-04-18	AQMS1	Sunny	16:46	24-hour TSP	58	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR1	Sunny	11:35	24-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR5	Sunny	16:23	24-hour TSP	65	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR6	Sunny	16:12	24-hour TSP	75	ug/m3
TMCLKL	HY/2012/08	2015-04-18	ASR10	Sunny	16:01	24-hour TSP	50	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2015-04-21	ASR10	Sunny	11:06	24-hour TSP	61	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR6	Sunny	11:18	24-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR5	Sunny	11:29	24-hour TSP	126	ug/m3
TMCLKL	HY/2012/08	2015-04-21	ASR1	Sunny	11:41	24-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2015-04-21	AQMS1	Sunny	11:52	24-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR1	Cloudy	12:16	24-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2015-04-24	AQMS1	Cloudy	12:27	24-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR5	Cloudy	12:04	24-hour TSP	105	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR6	Cloudy	11:53	24-hour TSP	133	ug/m3
TMCLKL	HY/2012/08	2015-04-24	ASR10	Cloudy	11:42	24-hour TSP	130	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR10	Sunny	16:21	24-hour TSP	116	ug/m3
TMCLKL	HY/2012/08	2015-04-27	AQMS1	Sunny	18:07	24-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR1	Sunny	17:56	24-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR5	Sunny	17:45	24-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2015-04-27	ASR6	Sunny	17:33	24-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	2015-04-30	AQMS1	Sunny	18:08	24-hour TSP	61	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR1	Sunny	17:55	24-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR5	Sunny	17:43	24-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR6	Sunny	17:34	24-hour TSP	57	ug/m3
TMCLKL	HY/2012/08	2015-04-30	ASR10	Sunny	17:22	24-hour TSP	67	ug/m3

Appendix H

## Meteorological Data



<b>Meteorological Data for Impact Monitoring in the reporting period</b>			
<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/03	0:00	0.4	91
15/04/03	1:00	0	56
15/04/03	2:00	0.4	201
15/04/03	3:00	0.9	179
15/04/03	4:00	0.4	5
15/04/03	5:00	0.9	81
15/04/03	6:00	0	165
15/04/03	7:00	1.8	159
15/04/03	8:00	2.7	181
15/04/03	9:00	2.2	179
15/04/03	10:00	2.2	182
15/04/03	11:00	2.2	173
15/04/03	12:00	2.2	174
15/04/03	13:00	1.8	166
15/04/03	14:00	1.8	154
15/04/03	15:00	2.2	169
15/04/03	16:00	2.2	165
15/04/03	17:00	2.7	156
15/04/03	18:00	2.2	146
15/04/03	19:00	1.8	135
15/04/03	20:00	0.9	151
15/04/03	21:00	1.3	140
15/04/03	22:00	1.3	146
15/04/03	23:00	1.8	144
15/04/04	0:00	1.3	132
15/04/04	1:00	1.3	95
15/04/04	2:00	0.9	88
15/04/04	3:00	1.3	91
15/04/04	4:00	0.9	87
15/04/04	5:00	1.8	133
15/04/04	6:00	2.2	140
15/04/04	7:00	1.3	129
15/04/04	8:00	1.8	161
15/04/04	9:00	2.2	133
15/04/04	10:00	1.8	147
15/04/04	11:00	2.2	132
15/04/04	12:00	1.8	182
15/04/04	13:00	1.8	173
15/04/04	14:00	1.8	179
15/04/04	15:00	1.3	166
15/04/04	16:00	2.2	175
15/04/04	17:00	2.7	182
15/04/04	18:00	2.2	184
15/04/04	19:00	1.8	144
15/04/04	20:00	1.3	113
15/04/04	21:00	1.8	125
15/04/04	22:00	1.3	131
15/04/04	23:00	1.3	161
15/04/06	0:00	0	144
15/04/06	1:00	0.4	132
15/04/06	2:00	0.4	127
15/04/06	3:00	0.1	132
15/04/06	4:00	0.2	116
15/04/06	5:00	0.3	125

**Meteorological Data for Impact Monitoring in the reporting period**

<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/06	6:00	0.1	125
15/04/06	7:00	0	136
15/04/06	8:00	0	141
15/04/06	9:00	0.4	151
15/04/06	10:00	0.4	271
15/04/06	11:00	0.9	301
15/04/06	12:00	1.3	321
15/04/06	13:00	2.2	281
15/04/06	14:00	2.2	279
15/04/06	15:00	2.2	265
15/04/06	16:00	1.3	273
15/04/06	17:00	0.9	275
15/04/06	18:00	0.4	280
15/04/06	19:00	0.9	146
15/04/06	20:00	1.3	165
15/04/06	21:00	1.3	138
15/04/06	22:00	1.3	136
15/04/06	23:00	0.9	141
15/04/07	0:00	0.4	151
15/04/07	1:00	0	133
15/04/07	2:00	0	141
15/04/07	3:00	0.4	132
15/04/07	4:00	0.9	169
15/04/07	5:00	0	70
15/04/07	6:00	0.2	163
15/04/07	7:00	0	154
15/04/07	8:00	0.1	154
15/04/07	9:00	0.4	164
15/04/07	10:00	0.4	159
15/04/07	11:00	1.3	182
15/04/07	12:00	2.7	146
15/04/07	13:00	3.1	152
15/04/07	14:00	3.1	174
15/04/07	15:00	2.7	136
15/04/07	16:00	2.2	161
15/04/07	17:00	2.2	176
15/04/07	18:00	2.2	132
15/04/07	19:00	2.7	140
15/04/07	20:00	0.9	185
15/04/07	21:00	0.4	163
15/04/07	22:00	0.9	5
15/04/07	23:00	0.4	9
15/04/09	0:00	1.3	45
15/04/09	1:00	3.1	38
15/04/09	2:00	4	77
15/04/09	3:00	2.7	76
15/04/09	4:00	1.8	81
15/04/09	5:00	2.2	65
15/04/09	6:00	1.3	55
15/04/09	7:00	1.8	71
15/04/09	8:00	1.8	74
15/04/09	9:00	1.3	45
15/04/09	10:00	1.3	63
15/04/09	11:00	1.3	84

**Meteorological Data for Impact Monitoring in the reporting period**

<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/09	12:00	0.9	90
15/04/09	13:00	1.3	21
15/04/09	14:00	2.2	68
15/04/09	15:00	0.9	136
15/04/09	16:00	1.8	44
15/04/09	17:00	1.8	78
15/04/09	18:00	1.8	21
15/04/09	19:00	2.2	25
15/04/09	20:00	2.2	3
15/04/09	21:00	2.7	46
15/04/09	22:00	3.1	69
15/04/09	23:00	2.7	88
15/04/10	0:00	2.7	76
15/04/10	1:00	3.6	74
15/04/10	2:00	2.2	59
15/04/10	3:00	2.7	63
15/04/10	4:00	4.5	85
15/04/10	5:00	5.4	69
15/04/10	6:00	4.5	71
15/04/10	7:00	2.7	58
15/04/10	8:00	3.1	66
15/04/10	9:00	3.1	64
15/04/10	10:00	2.7	69
15/04/10	11:00	1.8	68
15/04/10	12:00	2.2	75
15/04/10	13:00	2.2	78
15/04/10	14:00	1.8	69
15/04/10	15:00	1.3	81
15/04/10	16:00	0.4	94
15/04/10	17:00	0.9	52
15/04/10	18:00	0.4	20
15/04/10	19:00	0.9	5
15/04/10	20:00	1.3	354
15/04/10	21:00	1.8	65
15/04/10	22:00	0.9	65
15/04/10	23:00	2.2	51
15/04/12	0:00	2.2	45
15/04/12	1:00	0	32
15/04/12	2:00	0.3	41
15/04/12	3:00	0	68
15/04/12	4:00	0.1	301
15/04/12	5:00	0.4	84
15/04/12	6:00	0.4	21
15/04/12	7:00	0	5
15/04/12	8:00	0	182
15/04/12	9:00	0.4	74
15/04/12	10:00	1.3	68
15/04/12	11:00	2.2	59
15/04/12	12:00	2.2	5
15/04/12	13:00	1.8	11
15/04/12	14:00	2.2	346
15/04/12	15:00	1.8	322
15/04/12	16:00	2.2	341
15/04/12	17:00	1.3	352

**Meteorological Data for Impact Monitoring in the reporting period**

<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/12	18:00	0.9	355
15/04/12	19:00	0.9	354
15/04/12	20:00	0.4	341
15/04/12	21:00	0	351
15/04/12	22:00	0.1	338
15/04/12	23:00	0.1	351
15/04/13	0:00	0.1	347
15/04/13	1:00	0	344
15/04/13	2:00	0.1	352
15/04/13	3:00	0	351
15/04/13	4:00	0.1	349
15/04/13	5:00	0.4	356
15/04/13	6:00	0	347
15/04/13	7:00	0.4	91
15/04/13	8:00	0.4	63
15/04/13	9:00	2.7	52
15/04/13	10:00	2.7	47
15/04/13	11:00	3.1	51
15/04/13	12:00	1.8	46
15/04/13	13:00	1.8	51
15/04/13	14:00	2.7	23
15/04/13	15:00	2.2	4
15/04/13	16:00	2.7	328
15/04/13	17:00	2.2	354
15/04/13	18:00	1.8	6
15/04/13	19:00	1.3	2
15/04/13	20:00	2.2	7
15/04/13	21:00	0	11
15/04/13	22:00	0	12
15/04/13	23:00	0	6
15/04/15	0:00	0.9	5
15/04/15	1:00	0.9	12
15/04/15	2:00	0.4	23
15/04/15	3:00	0.4	25
15/04/15	4:00	0.4	17
15/04/15	5:00	0.4	14
15/04/15	6:00	0.9	13
15/04/15	7:00	0.4	5
15/04/15	8:00	0	13
15/04/15	9:00	0	166
15/04/15	10:00	1.3	271
15/04/15	11:00	2.2	282
15/04/15	12:00	0.9	292
15/04/15	13:00	0.9	183
15/04/15	14:00	2.2	74
15/04/15	15:00	1.3	281
15/04/15	16:00	3.1	295
15/04/15	17:00	3.1	284
15/04/15	18:00	3.6	276
15/04/15	19:00	3.1	284
15/04/15	20:00	2.7	142
15/04/15	21:00	1.8	135
15/04/15	22:00	0.4	126
15/04/15	23:00	0.9	119

<b>Meteorological Data for Impact Monitoring in the reporting period</b>			
<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/16	0:00	0	104
15/04/16	1:00	0.9	12
15/04/16	2:00	0.4	5
15/04/16	3:00	0.4	23
15/04/16	4:00	0	27
15/04/16	5:00	0.4	33
15/04/16	6:00	0	24
15/04/16	7:00	0	25
15/04/16	8:00	0	37
15/04/16	9:00	0	10
15/04/16	10:00	1.3	274
15/04/16	11:00	0.9	285
15/04/16	12:00	1.3	277
15/04/16	13:00	2.7	269
15/04/16	14:00	2.7	274
15/04/16	15:00	3.1	265
15/04/16	16:00	2.2	255
15/04/16	17:00	1.3	271
15/04/16	18:00	0.4	263
15/04/16	19:00	0.9	111
15/04/16	20:00	0.4	125
15/04/16	21:00	0.4	12
15/04/16	22:00	0.4	24
15/04/16	23:00	0	138
15/04/18	0:00	3.1	174
15/04/18	1:00	3.1	159
15/04/18	2:00	2.2	163
15/04/18	3:00	2.2	142
15/04/18	4:00	1.8	132
15/04/18	5:00	2.2	115
15/04/18	6:00	2.2	162
15/04/18	7:00	2.7	157
15/04/18	8:00	2.2	148
15/04/18	9:00	2.7	171
15/04/18	10:00	4	174
15/04/18	11:00	3.1	173
15/04/18	12:00	2.7	182
15/04/18	13:00	1.8	183
15/04/18	14:00	1.3	185
15/04/18	15:00	2.2	179
15/04/18	16:00	1.8	176
15/04/18	17:00	1.8	184
15/04/18	18:00	1.8	200
15/04/18	19:00	1.8	204
15/04/18	20:00	1.3	215
15/04/18	21:00	1.3	263
15/04/18	22:00	0.9	241
15/04/18	23:00	0.9	259
15/04/19	0:00	0.4	221
15/04/19	1:00	0	215
15/04/19	2:00	0	254
15/04/19	3:00	0.4	238
15/04/19	4:00	0.4	201
15/04/19	5:00	0.4	225

**Meteorological Data for Impact Monitoring in the reporting period**

<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/19	6:00	0	221
15/04/19	7:00	0.4	271
15/04/19	8:00	0.4	285
15/04/19	9:00	0.4	267
15/04/19	10:00	1.3	274
15/04/19	11:00	1.8	288
15/04/19	12:00	1.8	276
15/04/19	13:00	2.2	271
15/04/19	14:00	2.7	281
15/04/19	15:00	2.7	267
15/04/19	16:00	2.7	273
15/04/19	17:00	1.8	25
15/04/19	18:00	0.4	185
15/04/19	19:00	0.9	281
15/04/19	20:00	0.4	291
15/04/19	21:00	2.7	284
15/04/19	22:00	2.7	268
15/04/19	23:00	2.2	274
15/04/21	0:00	0.9	277
15/04/21	1:00	1.3	3
15/04/21	2:00	0.9	15
15/04/21	3:00	0.4	20
15/04/21	4:00	0.4	351
15/04/21	5:00	1.3	349
15/04/21	6:00	0.4	351
15/04/21	7:00	0.9	12
15/04/21	8:00	0.9	88
15/04/21	9:00	1.3	74
15/04/21	10:00	1.3	62
15/04/21	11:00	1.8	51
15/04/21	12:00	2.2	63
15/04/21	13:00	2.2	51
15/04/21	14:00	1.8	63
15/04/21	15:00	1.8	57
15/04/21	16:00	1.3	81
15/04/21	17:00	0.9	274
15/04/21	18:00	0.4	265
15/04/21	19:00	0	272
15/04/21	20:00	0.4	122
15/04/21	21:00	0.4	114
15/04/21	22:00	1.8	105
15/04/21	23:00	1.8	142
15/04/22	0:00	1.8	126
15/04/22	1:00	1.3	118
15/04/22	2:00	0.4	100
15/04/22	3:00	0	98
15/04/22	4:00	0.4	101
15/04/22	5:00	1.8	74
15/04/22	6:00	1.8	73
15/04/22	7:00	2.2	69
15/04/22	8:00	1.3	46
15/04/22	9:00	1.3	123
15/04/22	10:00	1.8	178
15/04/22	11:00	1.8	185

**Meteorological Data for Impact Monitoring in the reporting period**

<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/22	12:00	2.2	181
15/04/22	13:00	0.9	178
15/04/22	14:00	0.9	271
15/04/22	15:00	0.9	284
15/04/22	16:00	2.7	169
15/04/22	17:00	3.6	174
15/04/22	18:00	3.6	192
15/04/22	19:00	3.6	174
15/04/22	20:00	4	169
15/04/22	21:00	2.7	124
15/04/22	22:00	2.2	112
15/04/22	23:00	3.1	132
15/04/24	0:00	0	164
15/04/24	1:00	0	169
15/04/24	2:00	0.4	170
15/04/24	3:00	0.4	132
15/04/24	4:00	1.3	124
15/04/24	5:00	0.4	116
15/04/24	6:00	0	125
15/04/24	7:00	0.4	130
15/04/24	8:00	0.9	124
15/04/24	9:00	1.3	119
15/04/24	10:00	0.9	127
15/04/24	11:00	0.9	130
15/04/24	12:00	0.4	275
15/04/24	13:00	1.8	269
15/04/24	14:00	1.8	281
15/04/24	15:00	0.9	301
15/04/24	16:00	0.9	332
15/04/24	17:00	0.4	323
15/04/24	18:00	0.9	291
15/04/24	19:00	0	183
15/04/24	20:00	0.4	123
15/04/24	21:00	0.9	118
15/04/24	22:00	0.4	126
15/04/24	23:00	0.4	115
15/04/25	0:00	0	104
15/04/25	1:00	0	123
15/04/25	2:00	0	115
15/04/25	3:00	0	104
15/04/25	4:00	0	132
15/04/25	5:00	0.4	115
15/04/25	6:00	1.3	106
15/04/25	7:00	0.9	100
15/04/25	8:00	1.8	123
15/04/25	9:00	2.2	145
15/04/25	10:00	3.1	167
15/04/25	11:00	2.2	123
15/04/25	12:00	2.2	165
15/04/25	13:00	2.7	171
15/04/25	14:00	3.1	155
15/04/25	15:00	3.1	175
15/04/25	16:00	3.6	169
15/04/25	17:00	3.1	132

<b>Meteorological Data for Impact Monitoring in the reporting period</b>			
<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/25	18:00	2.7	124
15/04/25	19:00	2.2	119
15/04/25	20:00	1.8	131
15/04/25	21:00	2.2	141
15/04/25	22:00	2.7	152
15/04/25	23:00	2.2	161
15/04/27	0:00	1.3	104
15/04/27	1:00	0.4	115
15/04/27	2:00	0	123
15/04/27	3:00	0	124
15/04/27	4:00	0	91
15/04/27	5:00	0	86
15/04/27	6:00	0.4	104
15/04/27	7:00	0.9	93
15/04/27	8:00	1.3	87
15/04/27	9:00	1.8	124
15/04/27	10:00	1.8	174
15/04/27	11:00	1.3	168
15/04/27	12:00	1.8	123
15/04/27	13:00	1.8	115
15/04/27	14:00	1.3	274
15/04/27	15:00	1.8	295
15/04/27	16:00	1.3	342
15/04/27	17:00	1.3	351
15/04/27	18:00	0.4	326
15/04/27	19:00	0.4	126
15/04/27	20:00	1.8	115
15/04/27	21:00	2.2	132
15/04/27	22:00	2.2	126
15/04/27	23:00	2.2	141
15/04/28	0:00	1.3	106
15/04/28	1:00	0.9	113
15/04/28	2:00	0.4	127
15/04/28	3:00	0	103
15/04/28	4:00	0	115
15/04/28	5:00	0.4	100
15/04/28	6:00	0.4	98
15/04/28	7:00	0.4	97
15/04/28	8:00	0.4	113
15/04/28	9:00	0.4	185
15/04/28	10:00	0.9	273
15/04/28	11:00	0.9	304
15/04/28	12:00	1.3	311
15/04/28	13:00	1.3	325
15/04/28	14:00	1.8	332
15/04/28	15:00	1.8	273
15/04/28	16:00	1.3	289
15/04/28	17:00	1.8	271
15/04/28	18:00	1.8	265
15/04/28	19:00	1.3	274
15/04/28	20:00	1.3	126
15/04/28	21:00	0.9	142
15/04/28	22:00	0.9	123
15/04/28	23:00	1.3	118



<b>Meteorological Data for Impact Monitoring in the reporting period</b>			
<b>Date (yy-mm-dd)</b>	<b>Time (24hrs)</b>	<b>Average of Wind Speed (m/s)</b>	<b>Average of Wind Direction (degree)</b>
15/04/30	0:00	0.9	140
15/04/30	1:00	0	111
15/04/30	2:00	0	75
15/04/30	3:00	0	69
15/04/30	4:00	0.4	347
15/04/30	5:00	0	351
15/04/30	6:00	0	274
15/04/30	7:00	0	259
15/04/30	8:00	0.4	122
15/04/30	9:00	0.4	174
15/04/30	10:00	0.9	275
15/04/30	11:00	1.8	269
15/04/30	12:00	2.2	273
15/04/30	13:00	2.2	281
15/04/30	14:00	1.8	259
15/04/30	15:00	2.2	266
15/04/30	16:00	1.3	278
15/04/30	17:00	1.8	131
15/04/30	18:00	2.2	116
15/04/30	19:00	2.2	127
15/04/30	20:00	1.8	131
15/04/30	21:00	1.8	119
15/04/30	22:00	1.8	123
15/04/30	23:00	1.8	120
15/05/01	0:00	1.8	123
15/05/01	1:00	2.2	174
15/05/01	2:00	2.2	145
15/05/01	3:00	1.8	132
15/05/01	4:00	1.8	141
15/05/01	5:00	1.8	152
15/05/01	6:00	1.3	134
15/05/01	7:00	1.8	127
15/05/01	8:00	1.8	131
15/05/01	9:00	1.8	155
15/05/01	10:00	2.2	163
15/05/01	11:00	2.2	157
15/05/01	12:00	2.2	154
15/05/01	13:00	2.7	163
15/05/01	14:00	3.1	179
15/05/01	15:00	2.7	172
15/05/01	16:00	2.7	168
15/05/01	17:00	2.7	185
15/05/01	18:00	3.1	172
15/05/01	19:00	2.7	184
15/05/01	20:00	2.7	155
15/05/01	21:00	4	168
15/05/01	22:00	2.7	174
15/05/01	23:00	1.3	184

Appendix I

## Impact Water Quality Monitoring Results

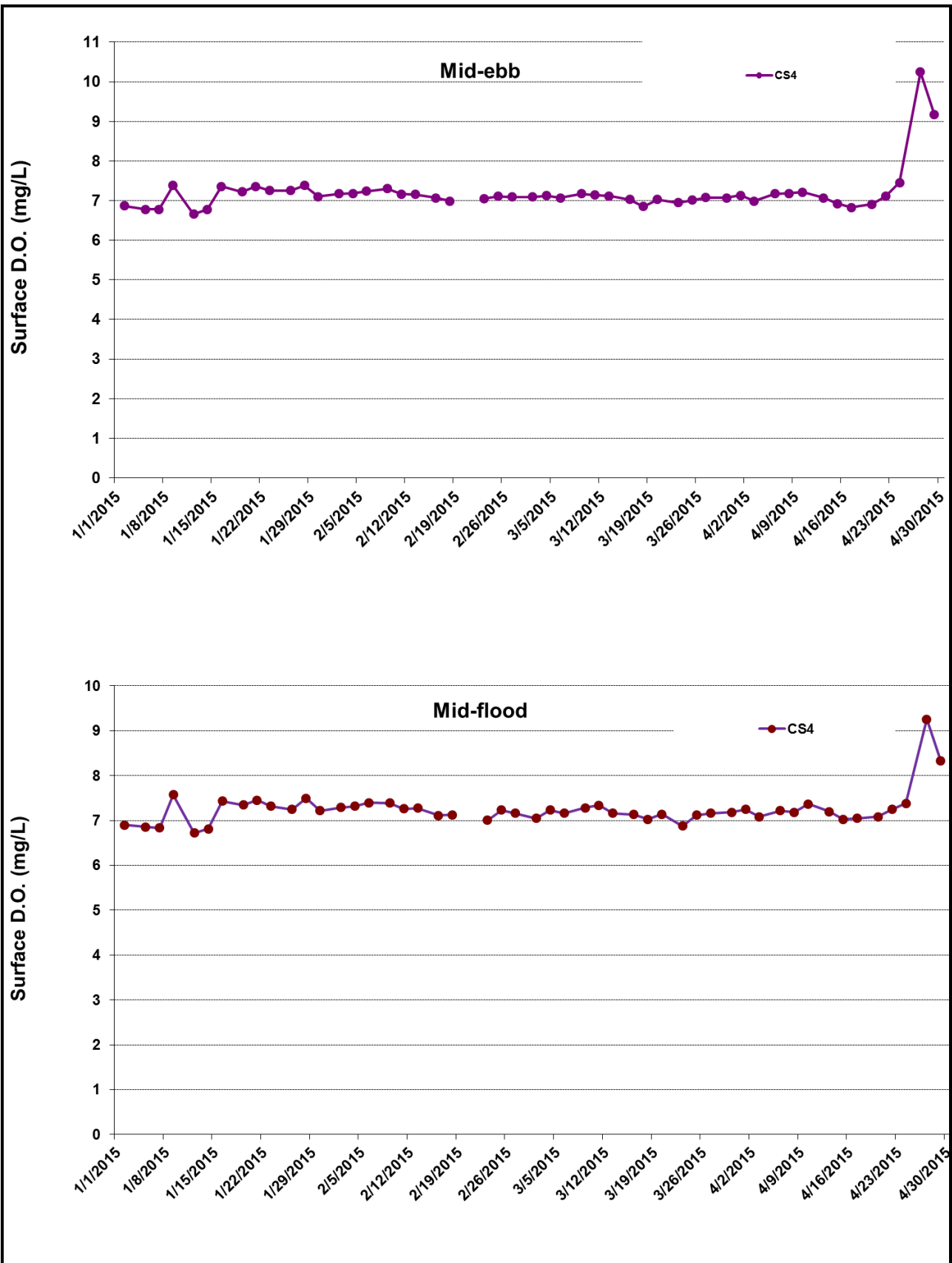


Figure I1 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



Ref: 0212330\_Impact-WQM\_April2015\_graphs\_Rev a.xls

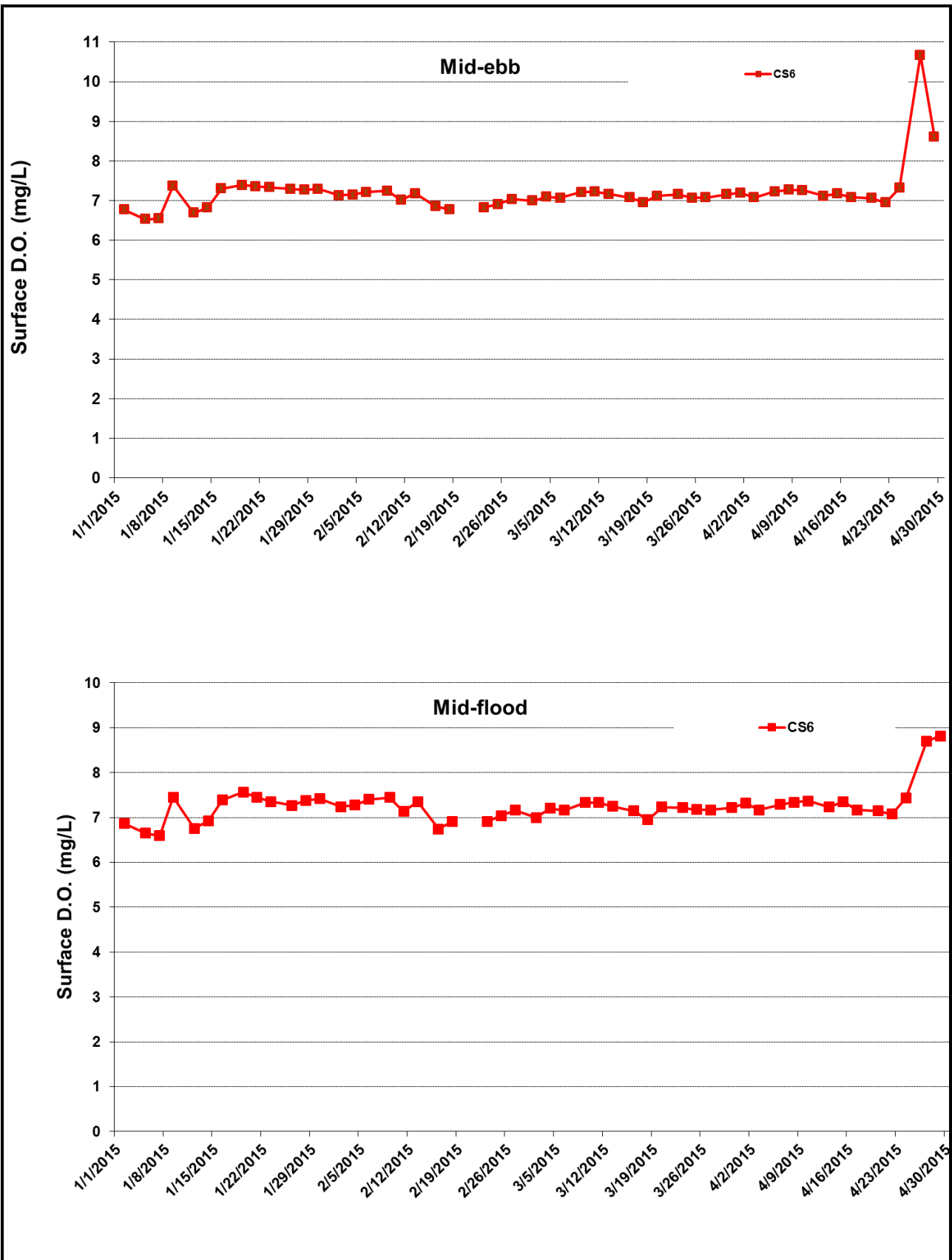


Figure I2 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



Ref: 0212330\_Impact-WQM\_April2015\_graphs\_Rev a.xls

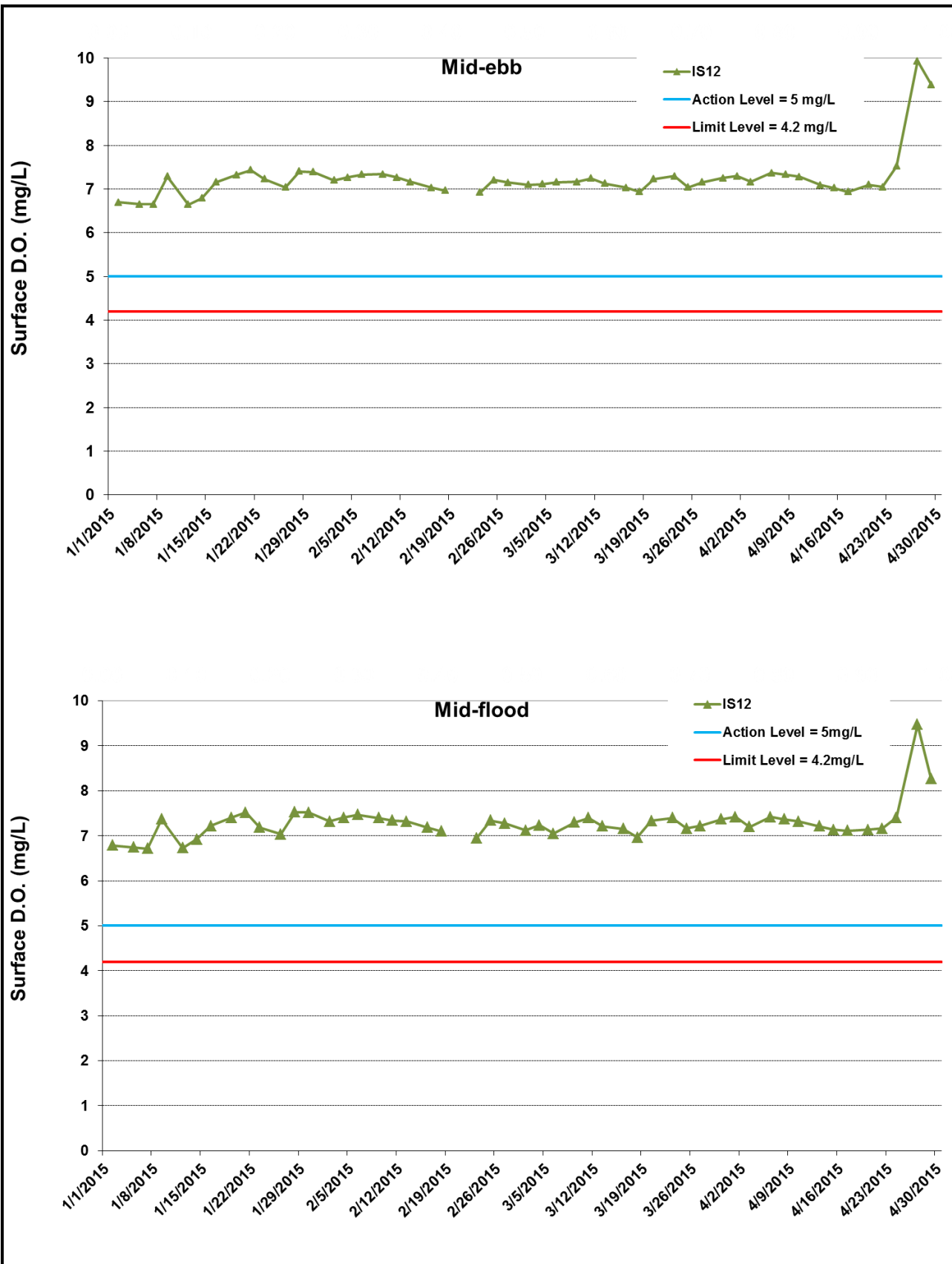


Figure I3 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



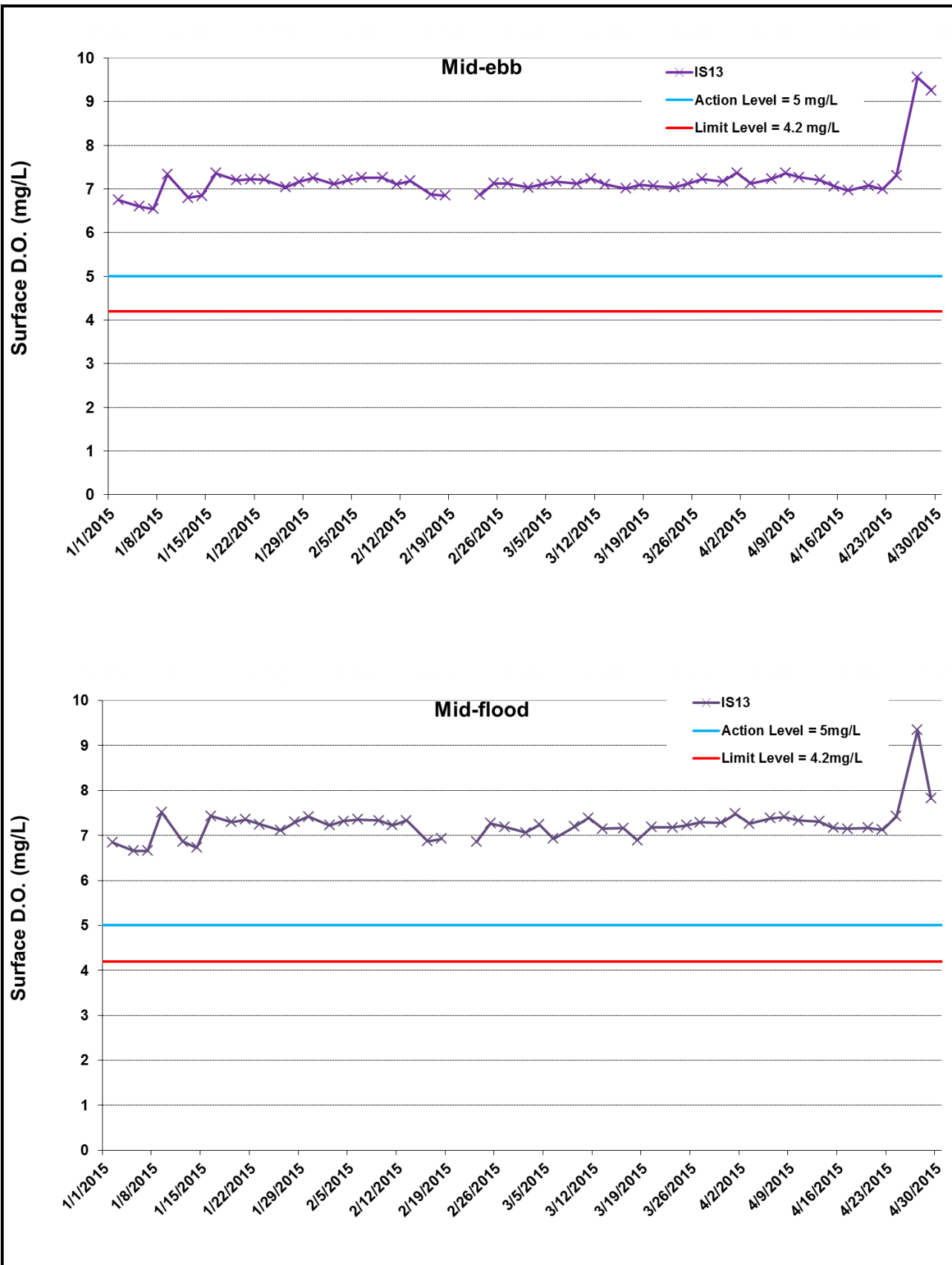


Figure I4 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



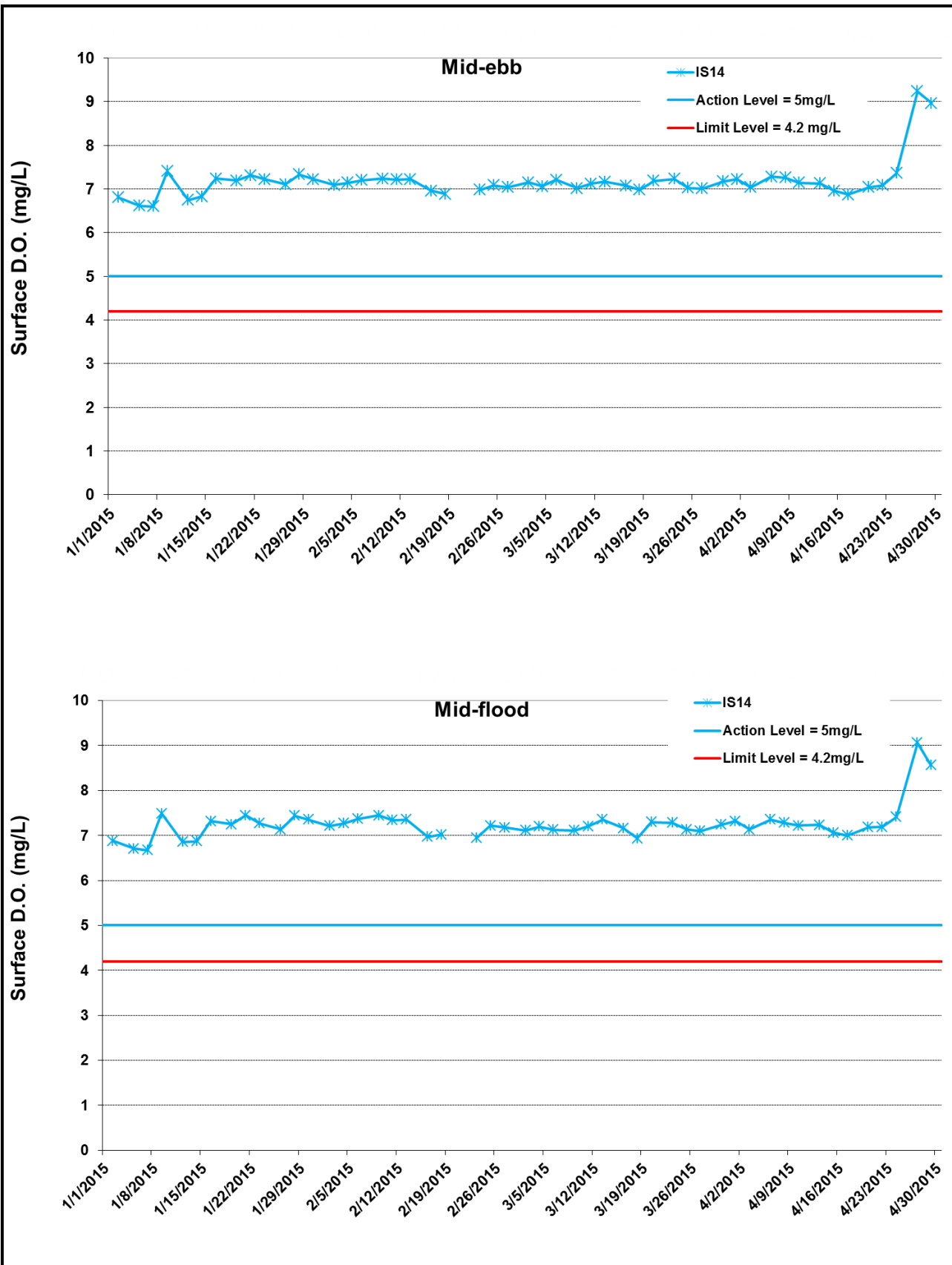
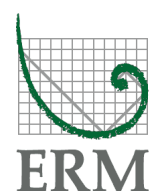


Figure I5 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



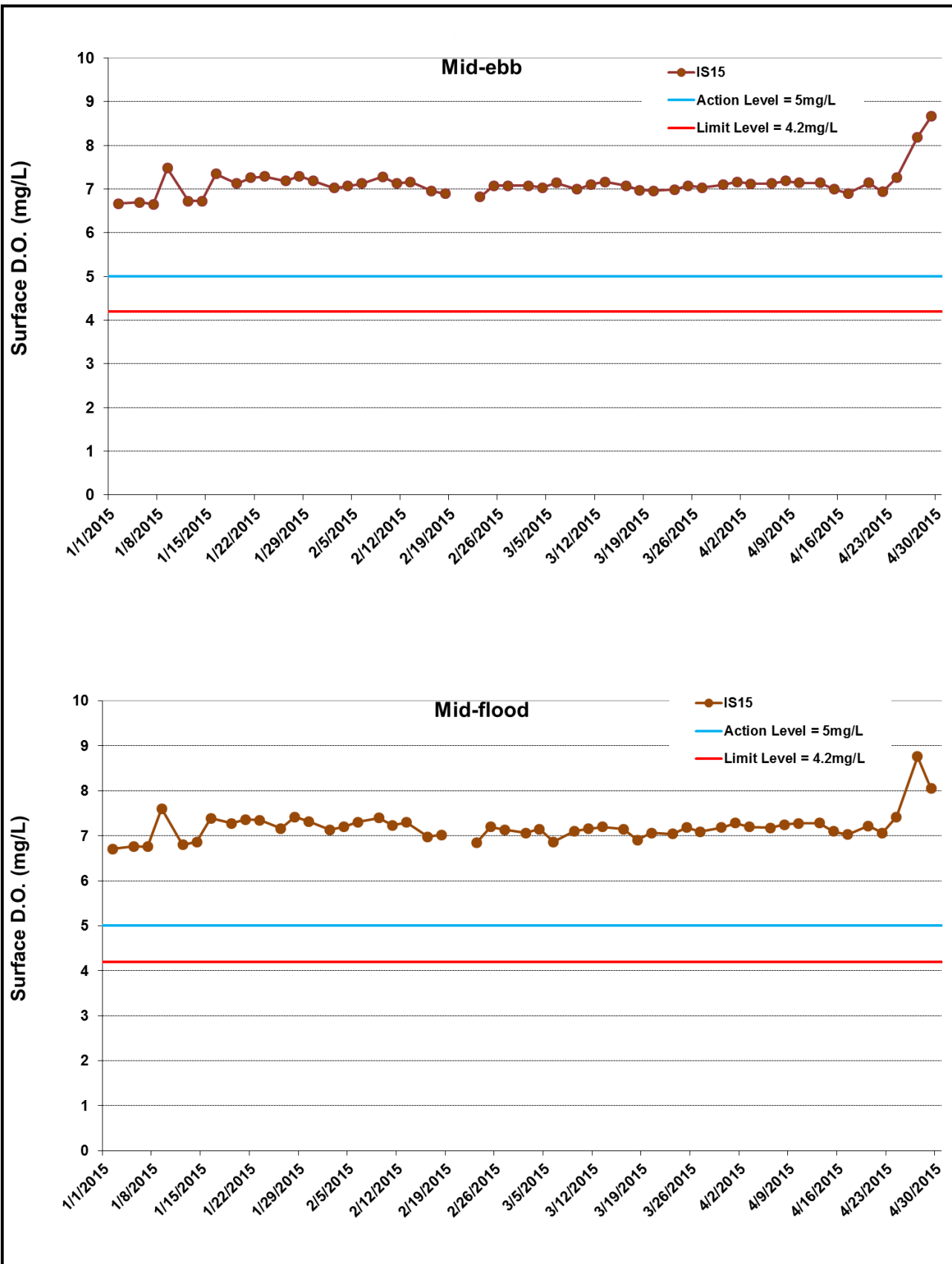
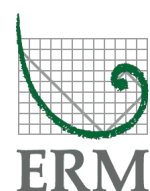


Figure I6 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.





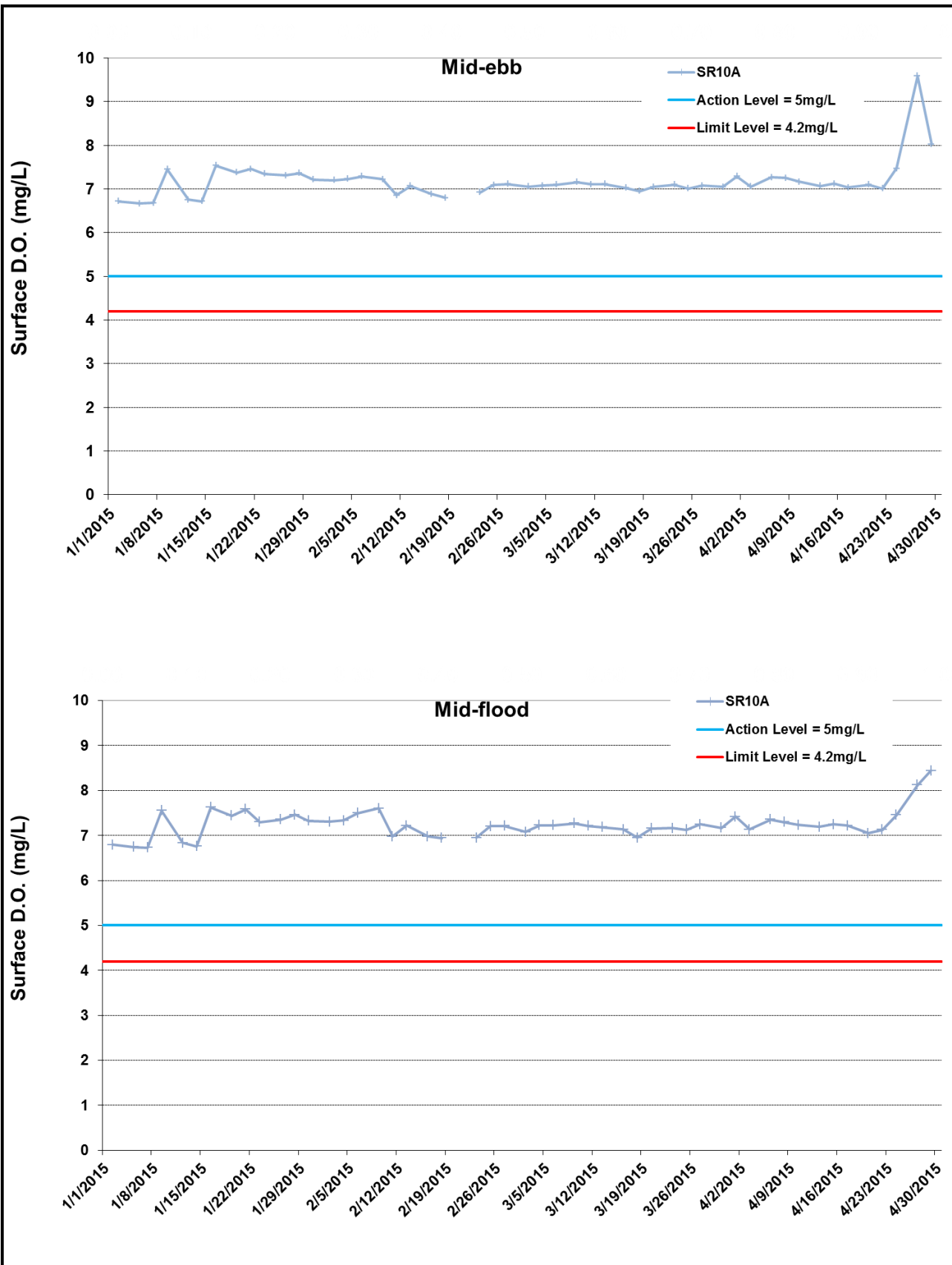


Figure I7 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



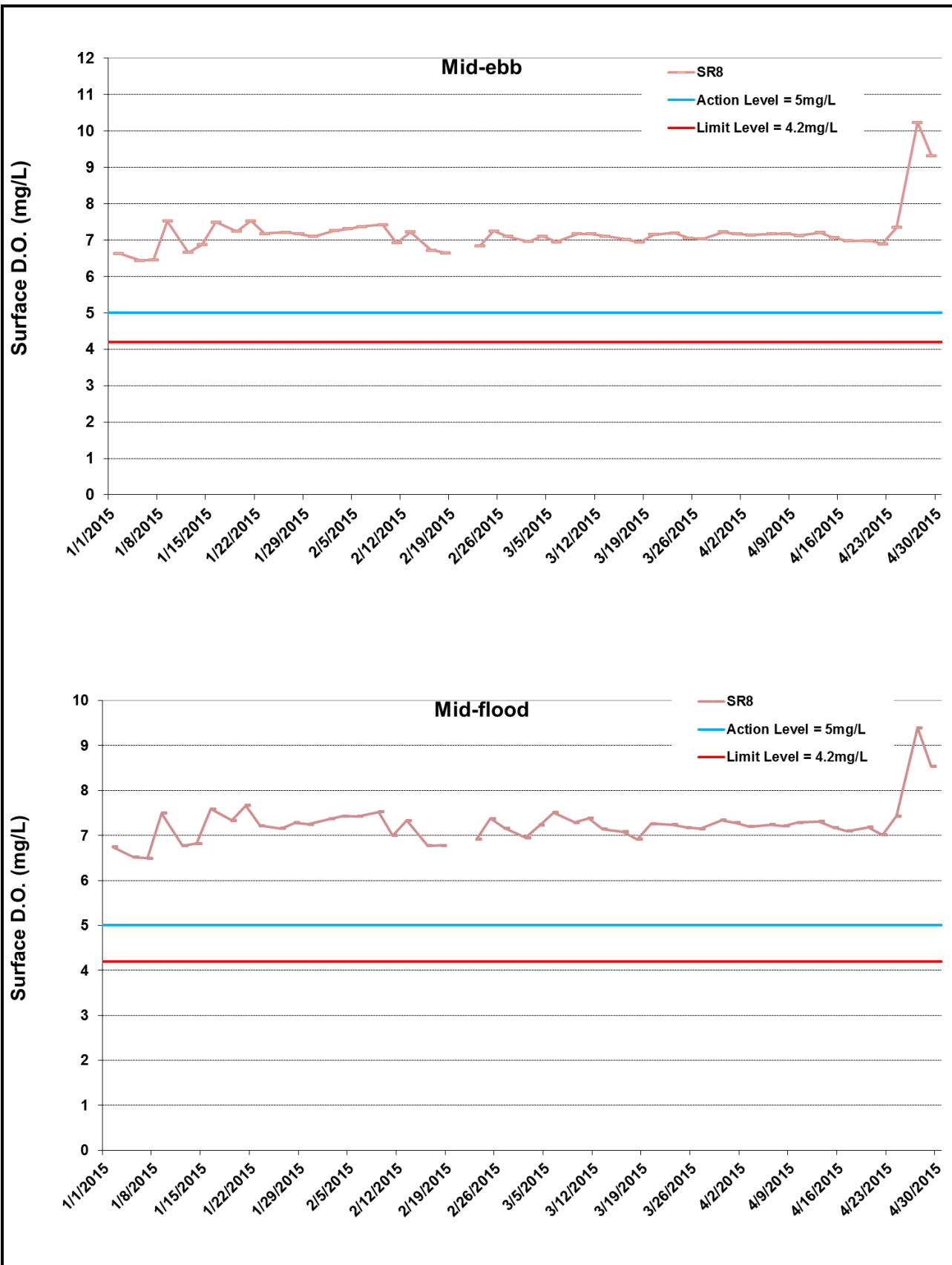
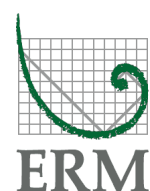


Figure I8 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



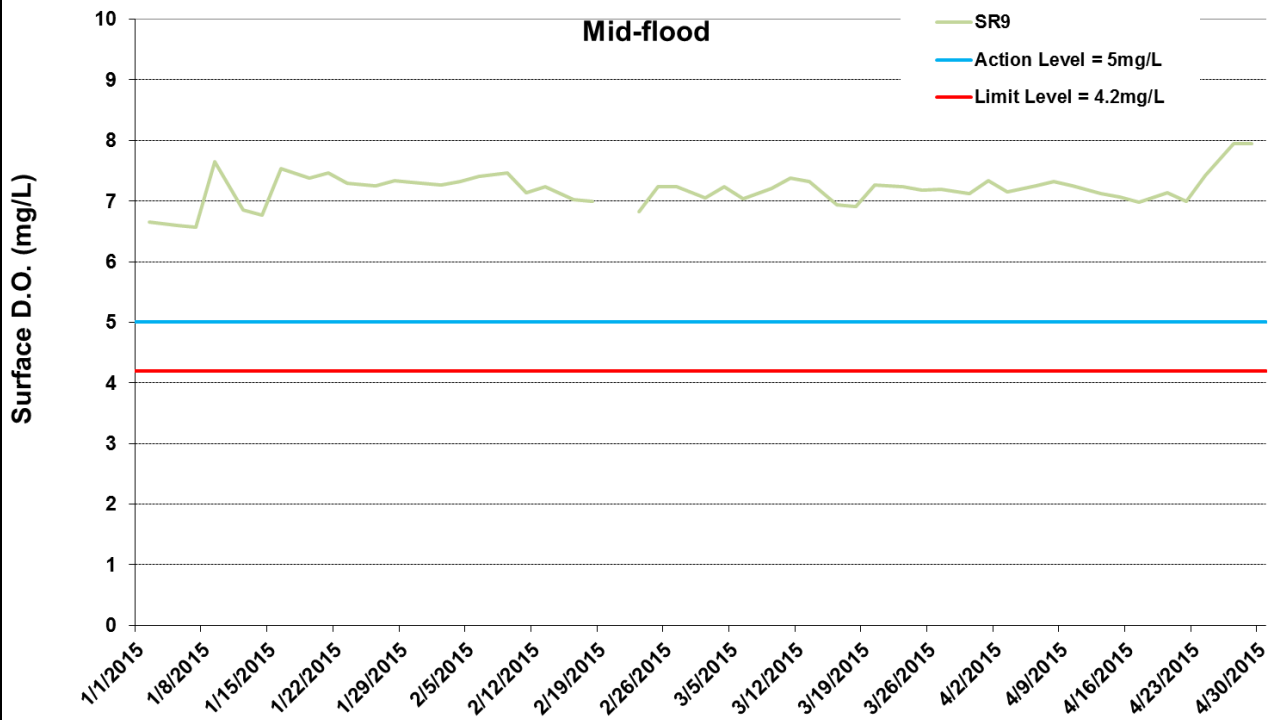
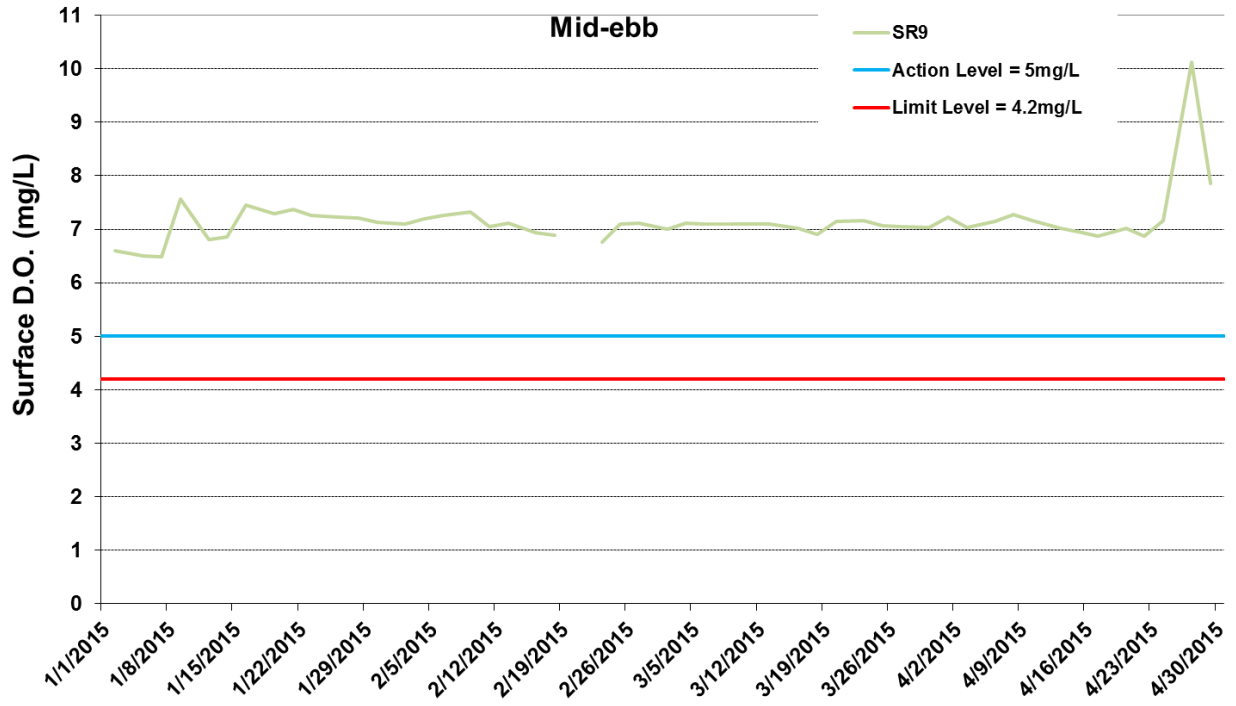
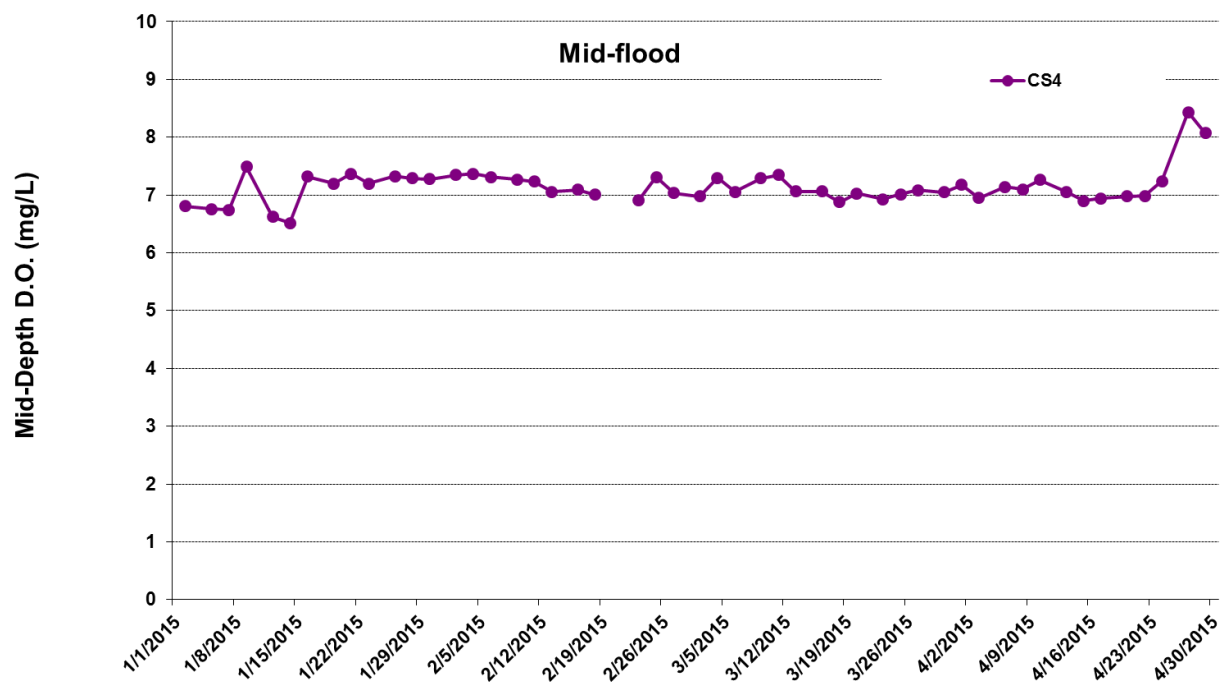
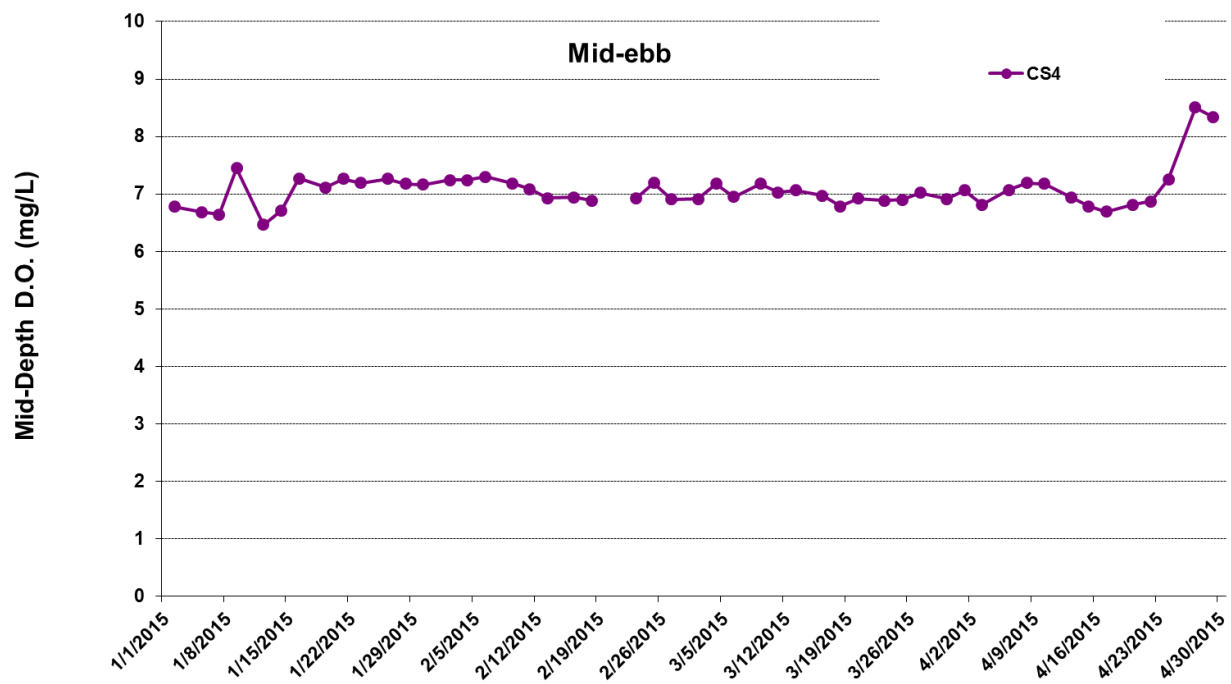


Figure I9 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 January 2015 and 30 April 2015 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.

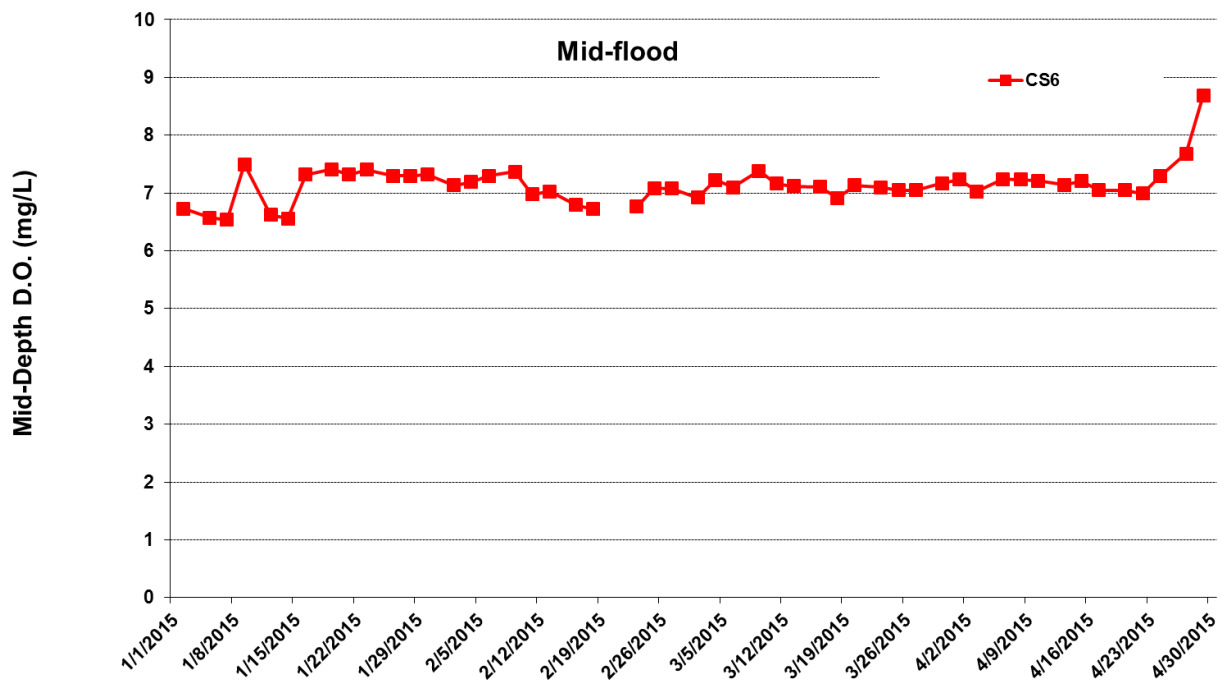
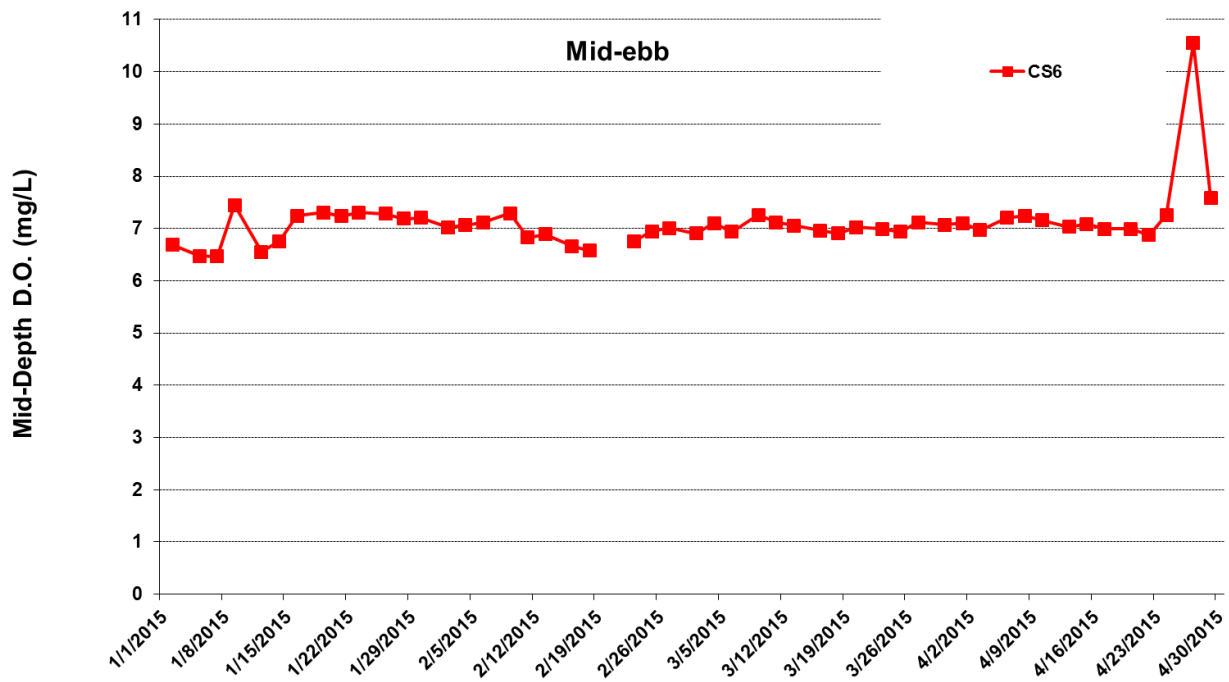




\*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I10 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 January 2015 and 30 April 2015 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.

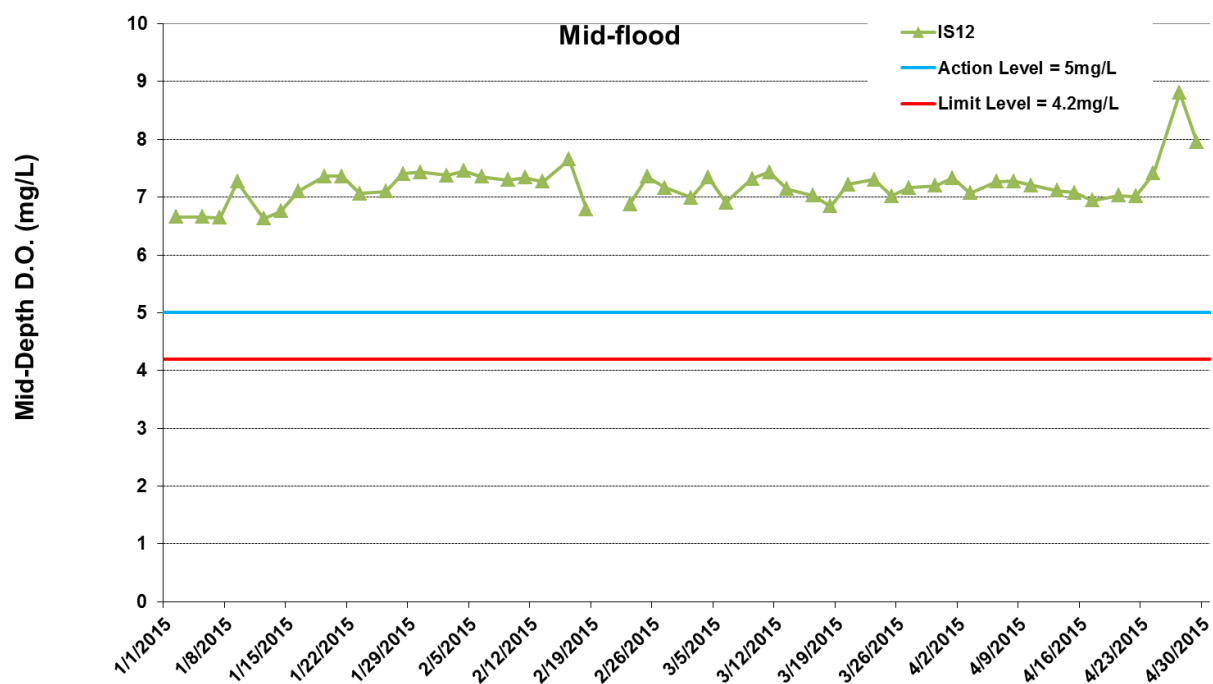
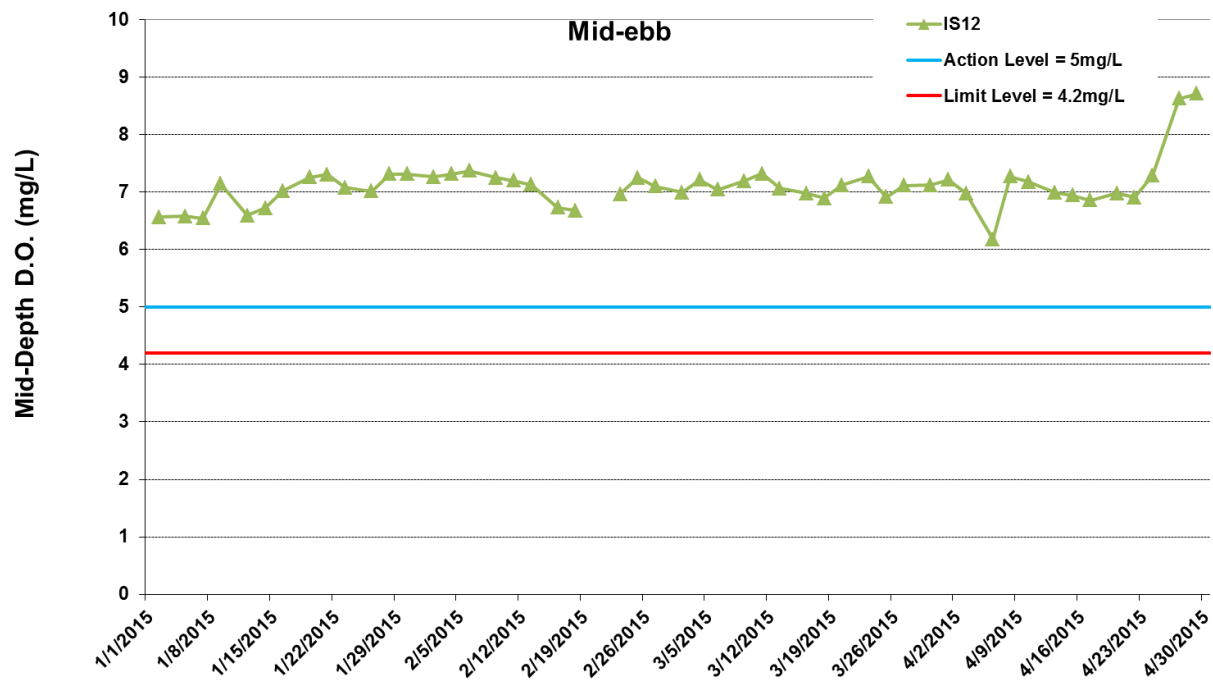




\*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I11 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 January 2015 and 30 April 2015 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.

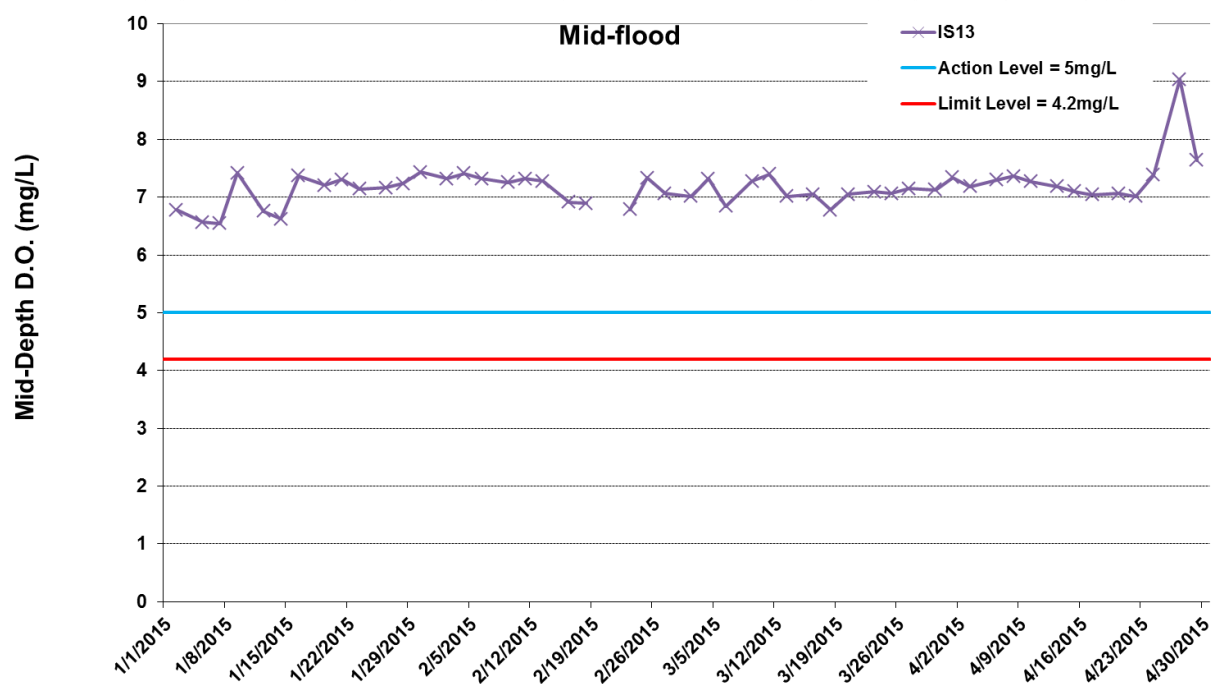
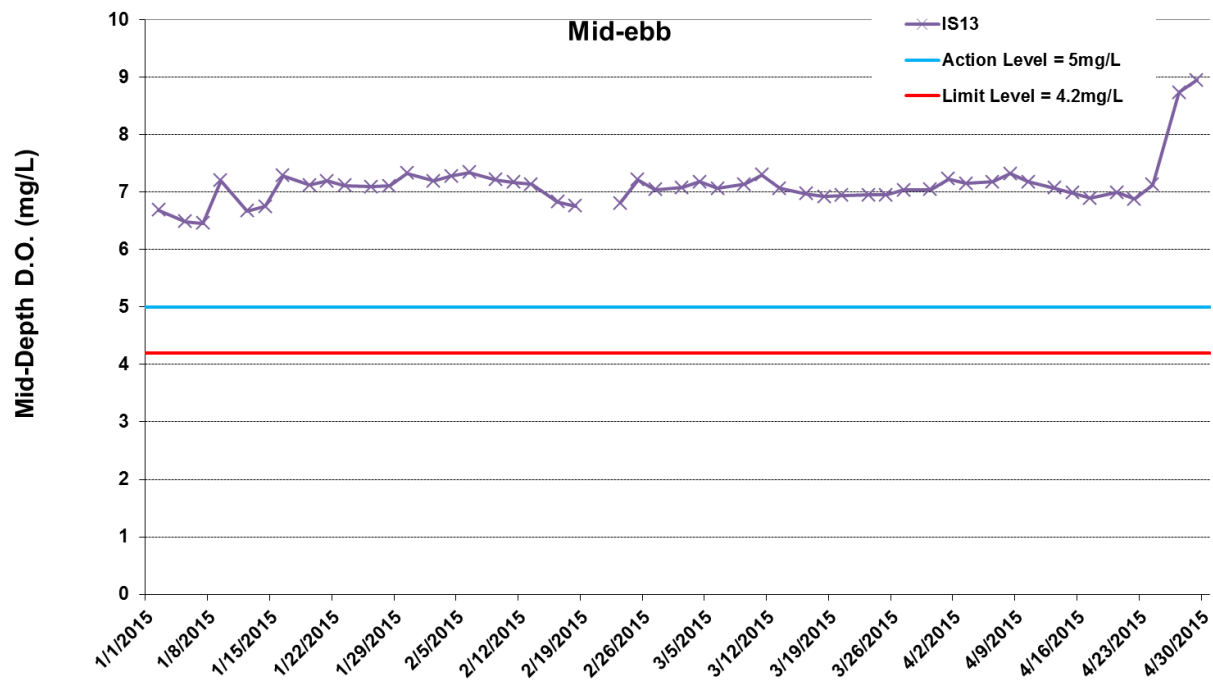




\*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I12 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 January 2015 and 30 April 2015 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.

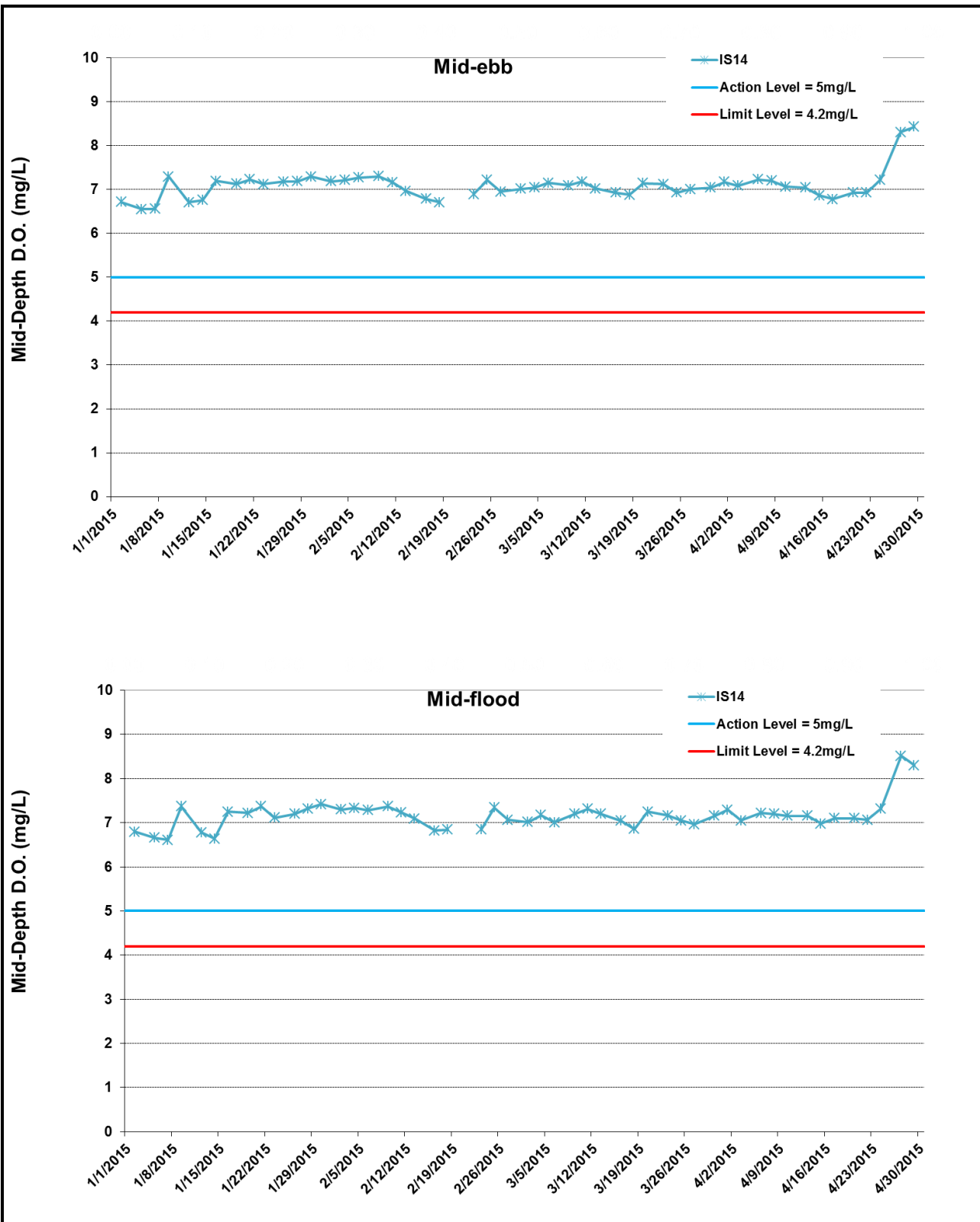




\*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I13 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 January 2015 and 30 April 2015 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



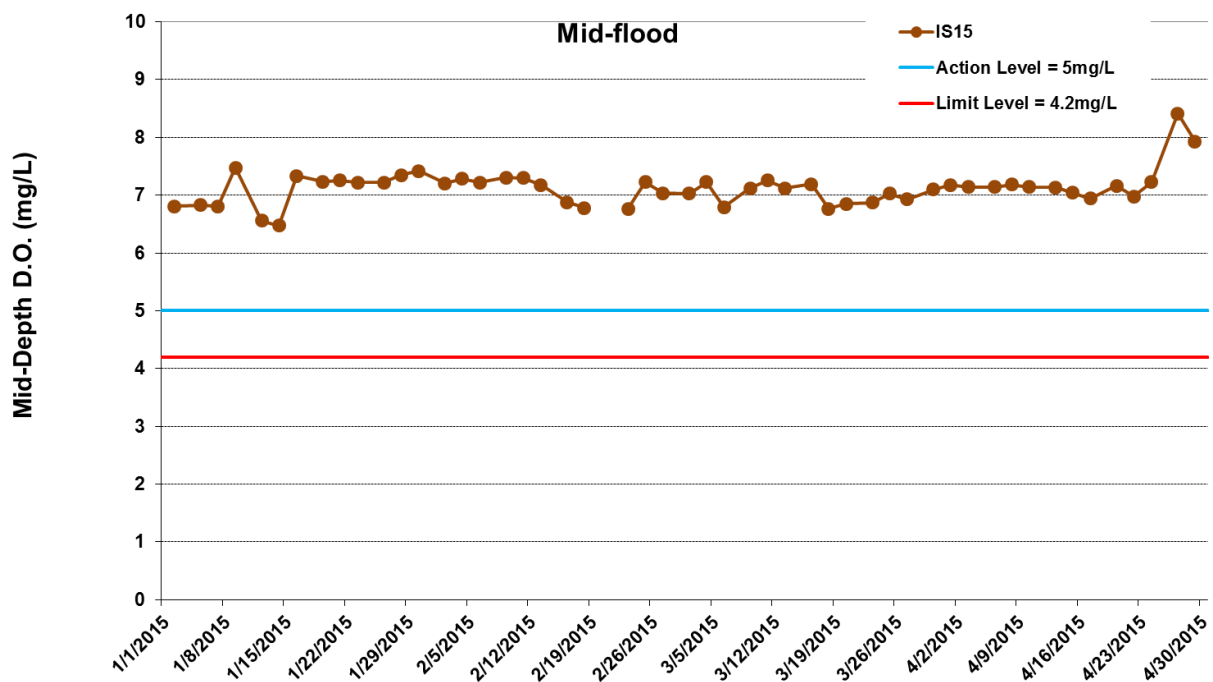
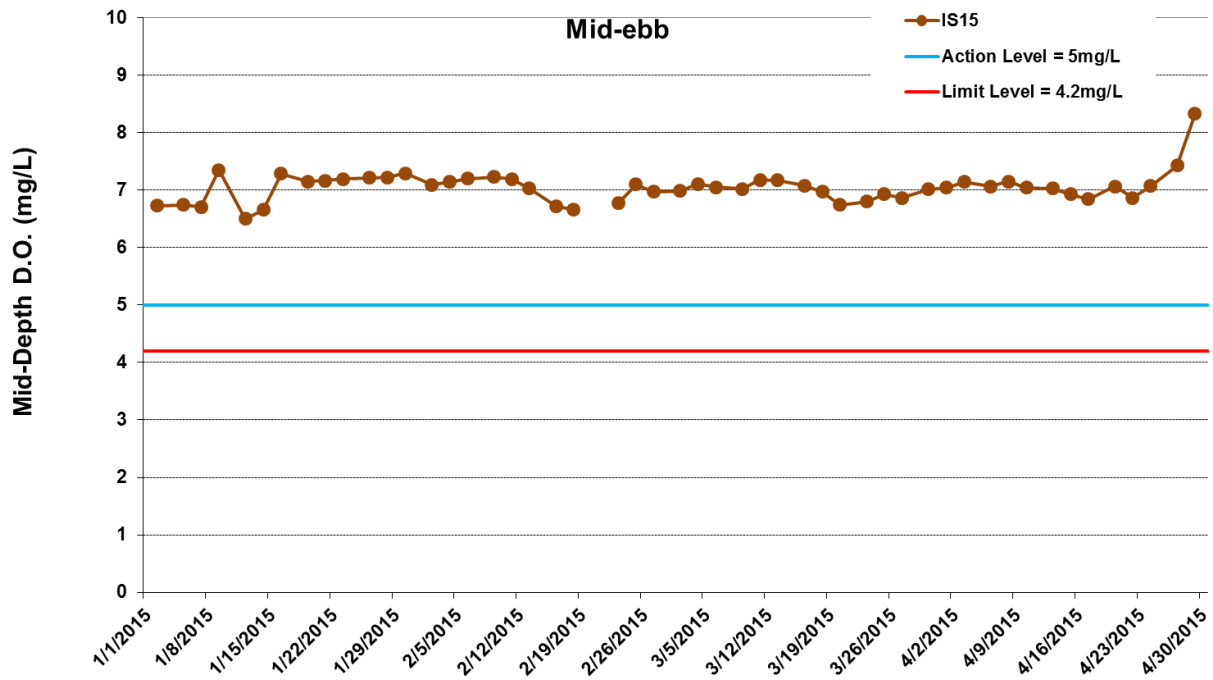


\*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I14 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 January 2015 and 30 April 2015 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



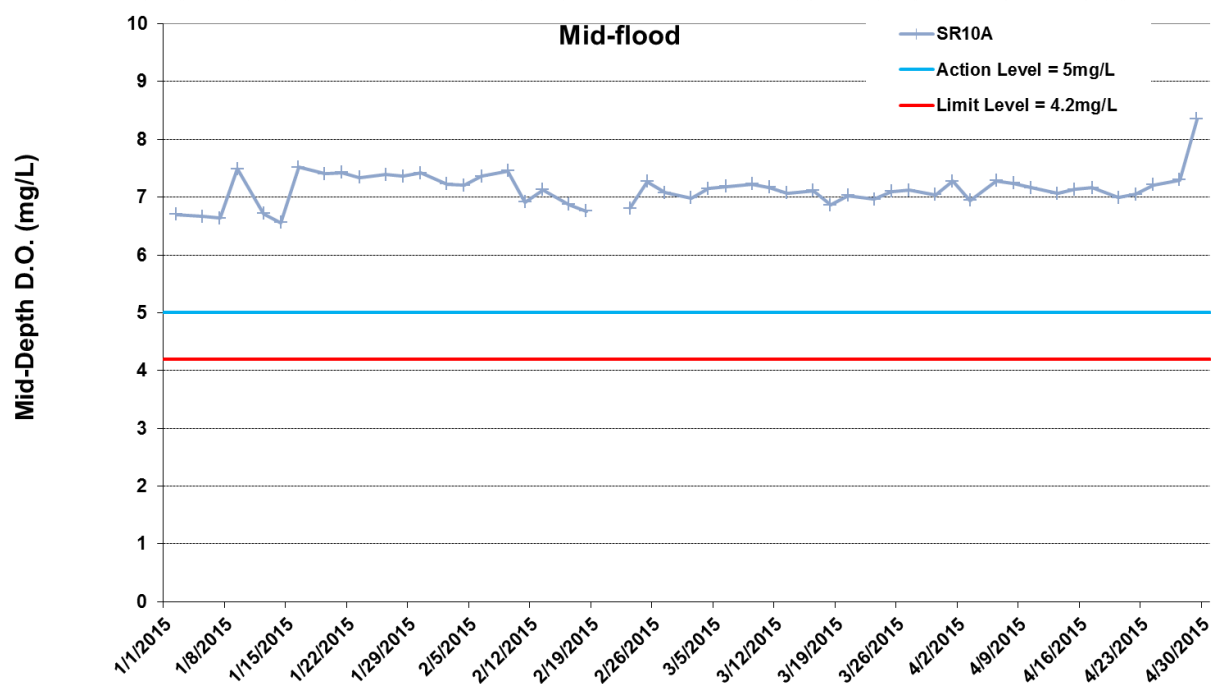
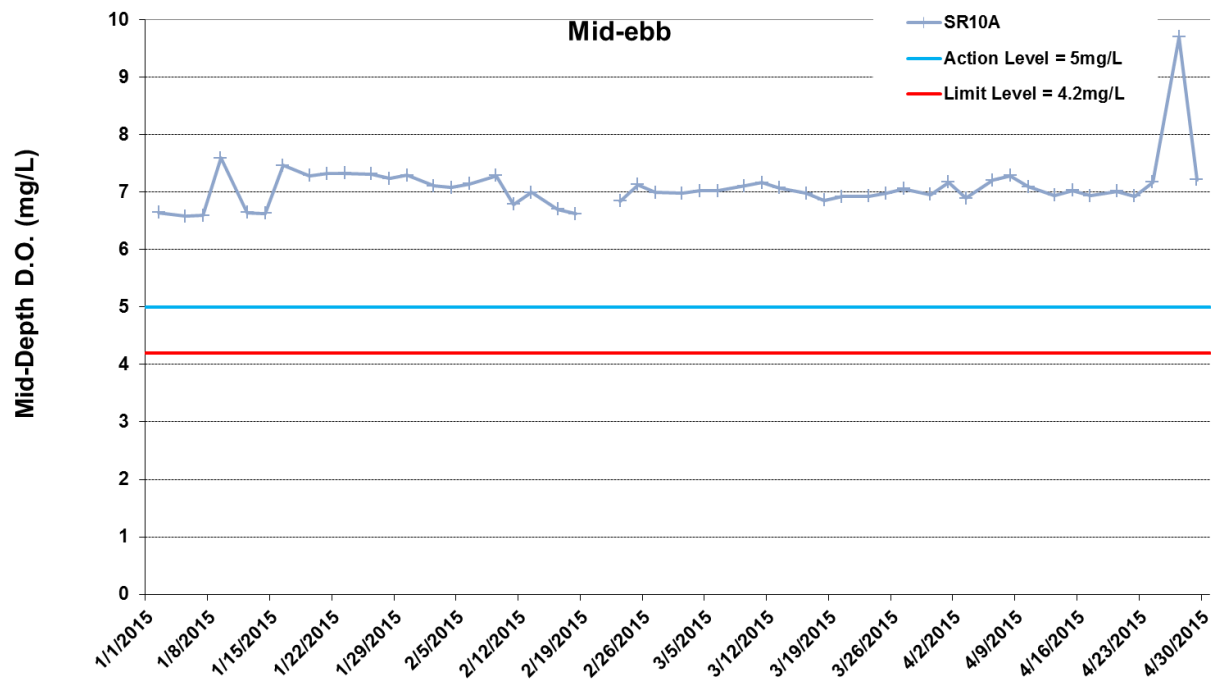




\*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I15 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 January 2015 and 30 April 2015 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.





\*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I16 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 January 2015 and 30 April 2015 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



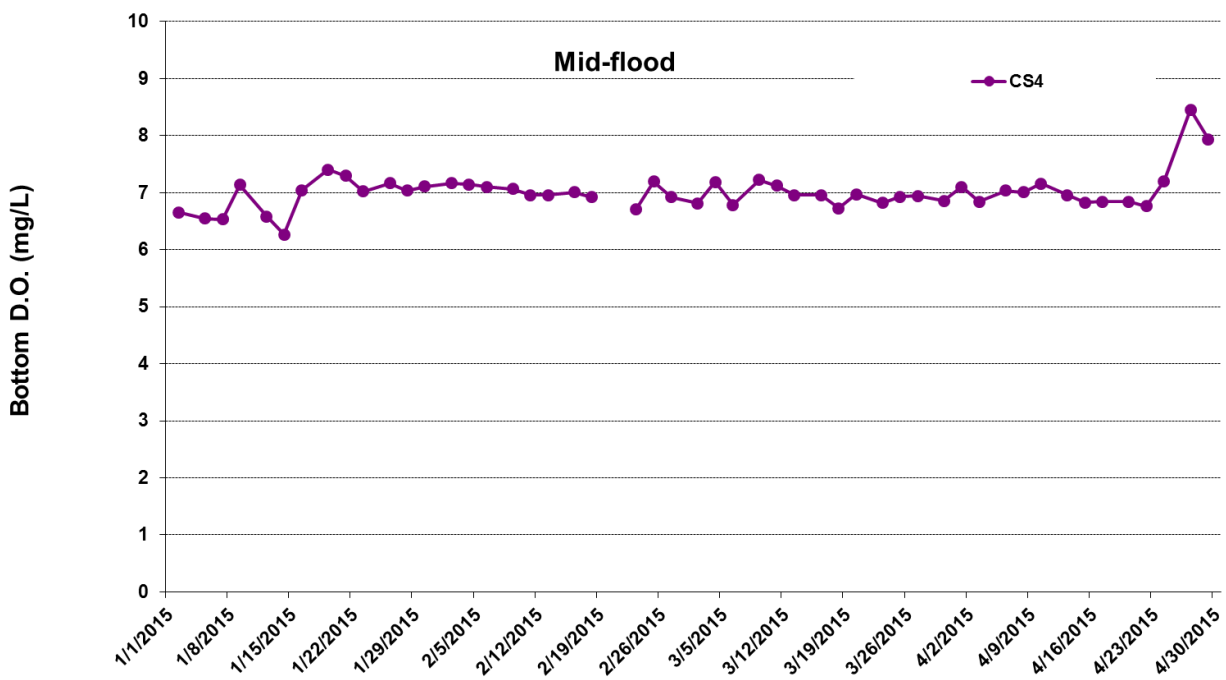
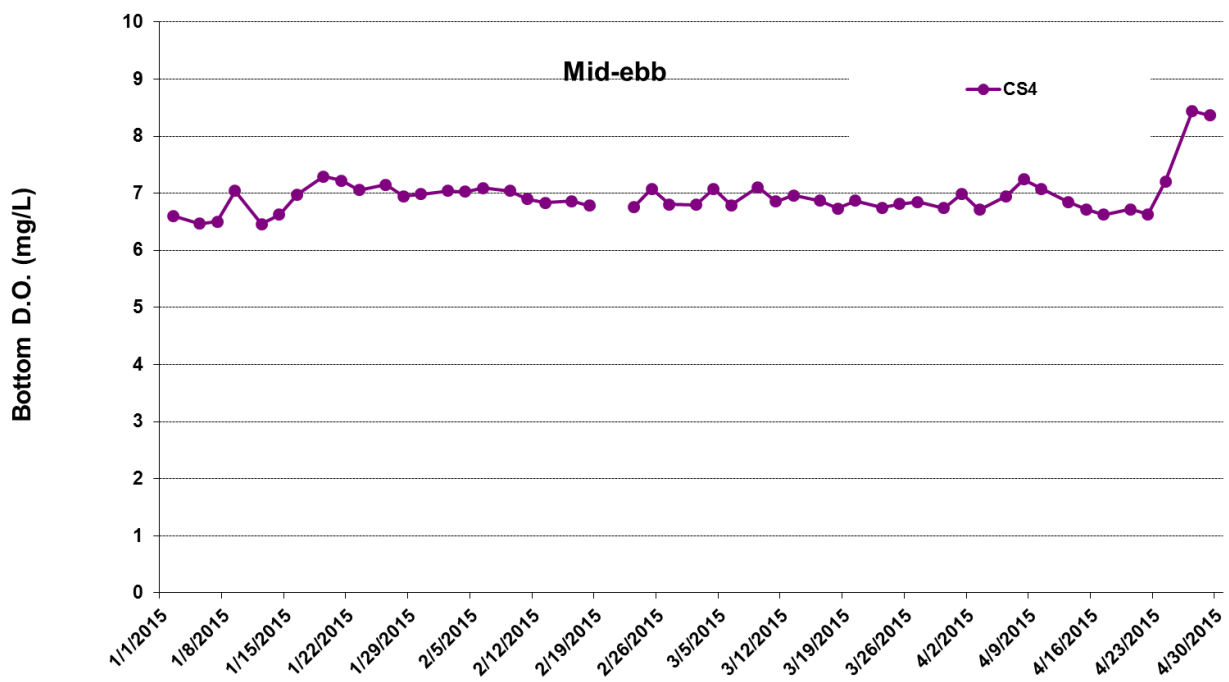


Figure I17 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



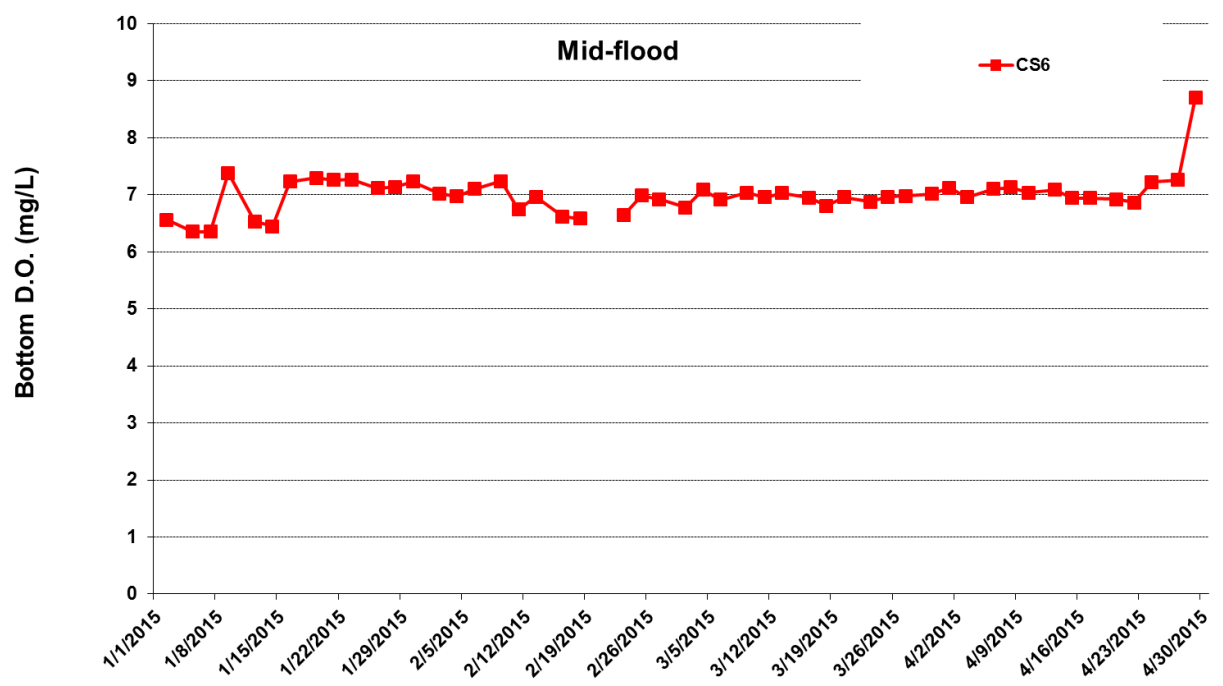
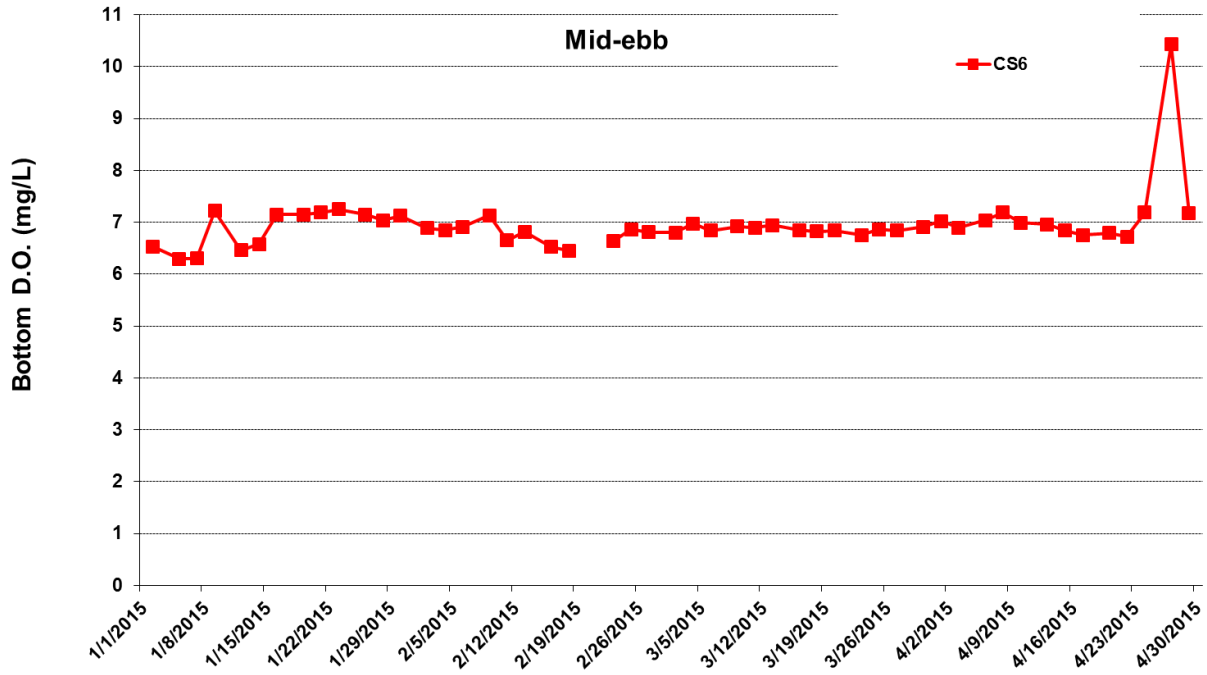


Figure I18 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



Ref: 0212330\_Impact-WQM\_April2015\_graphs\_Rev a.xls

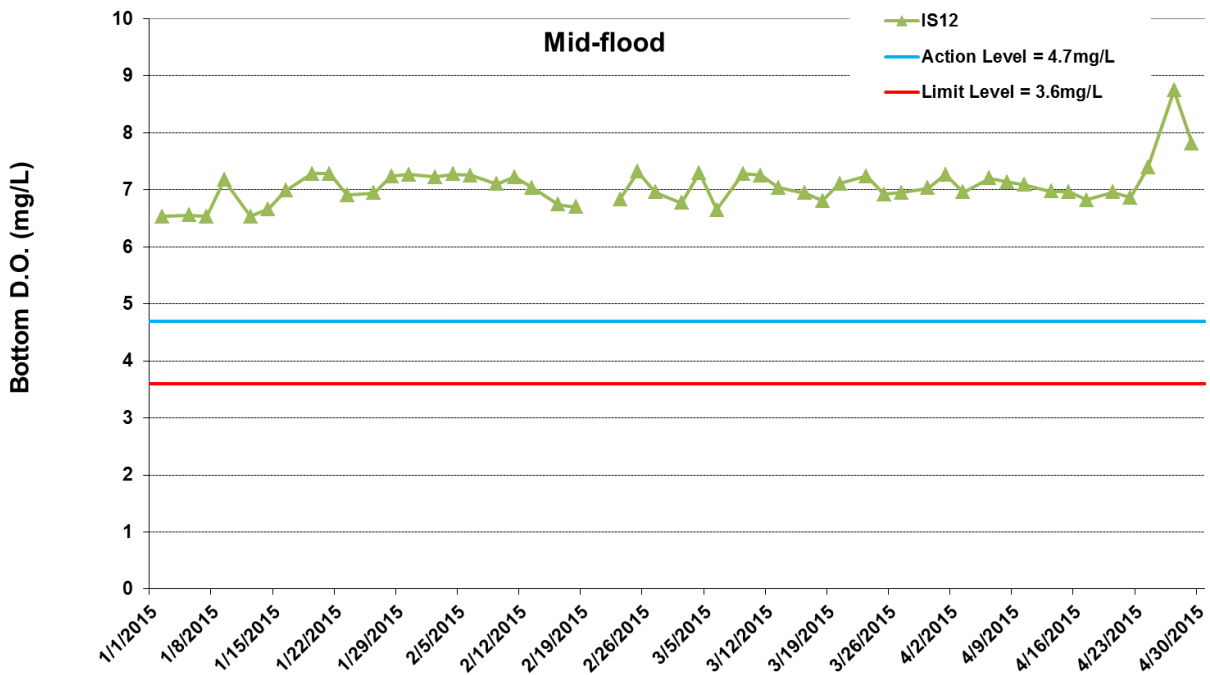
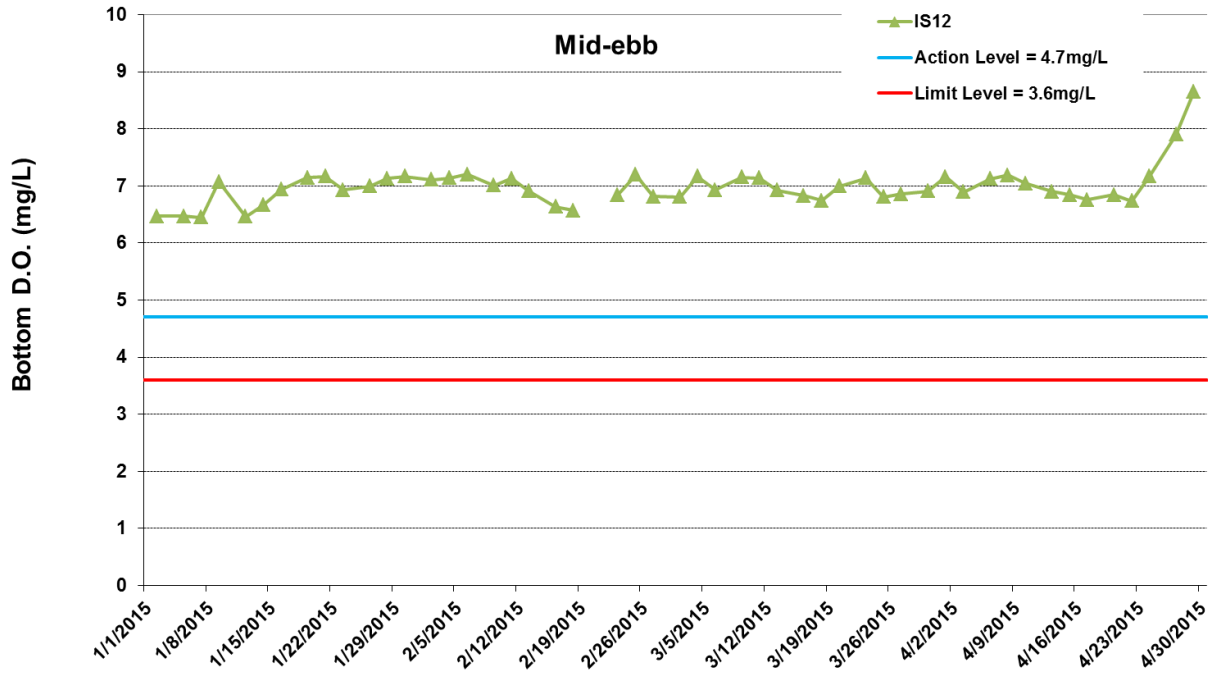


Figure I19 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



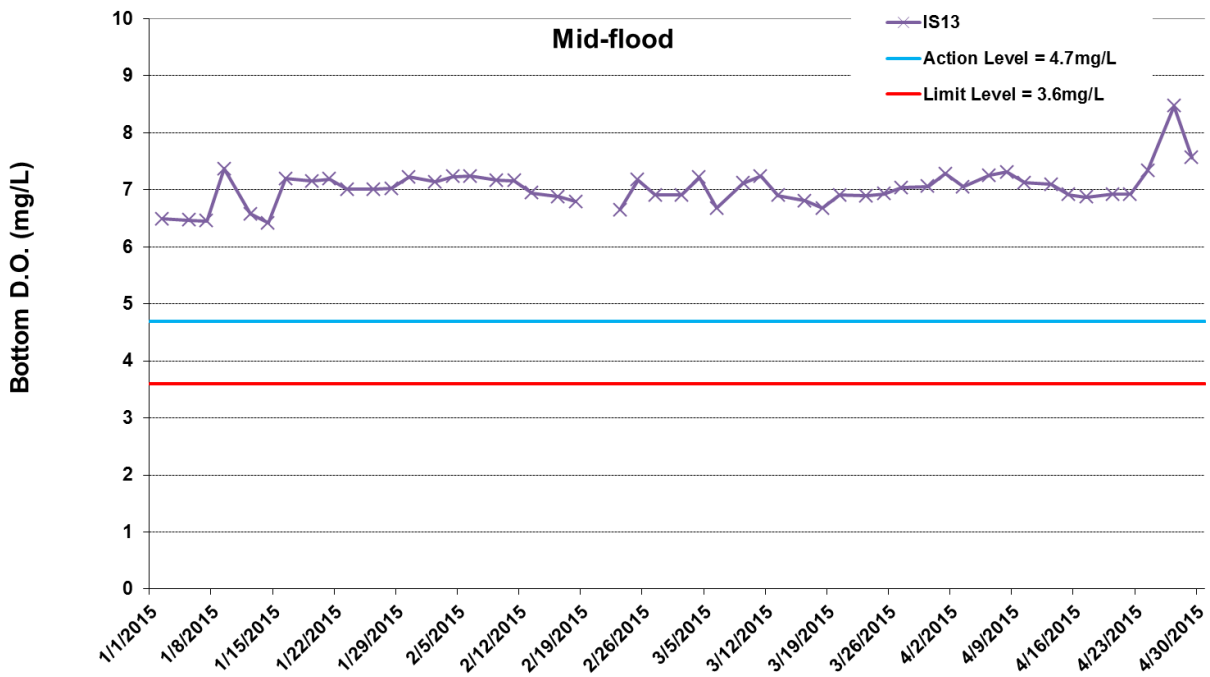
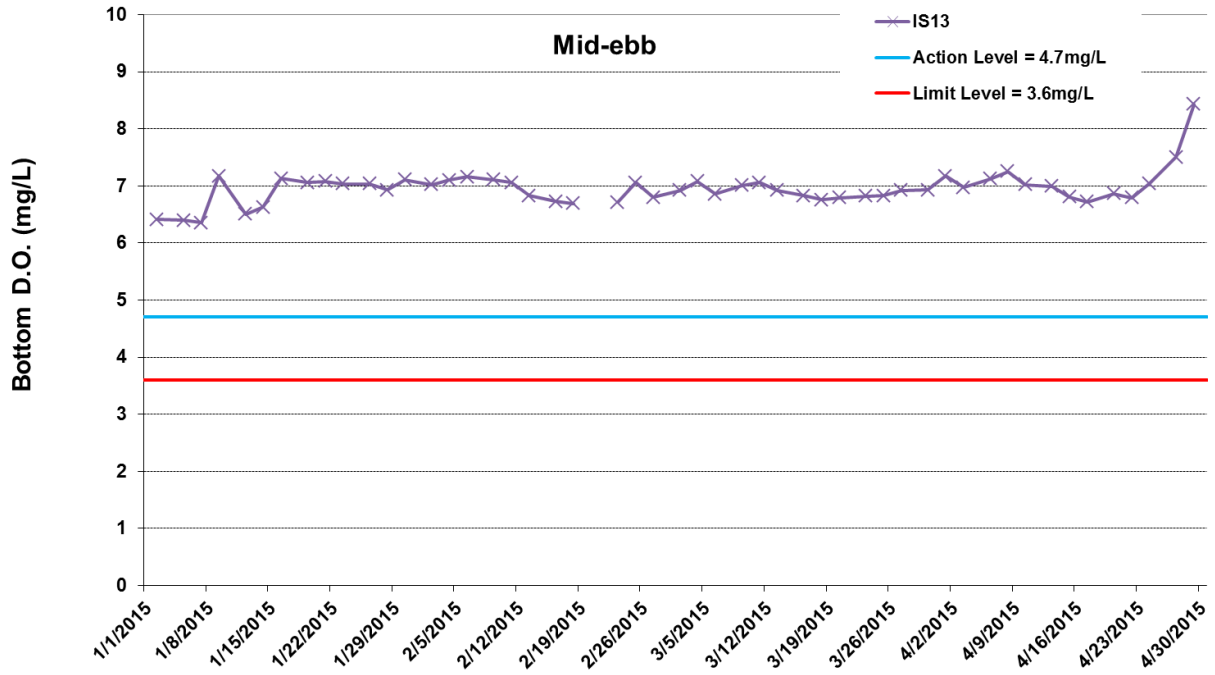


Figure I20 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



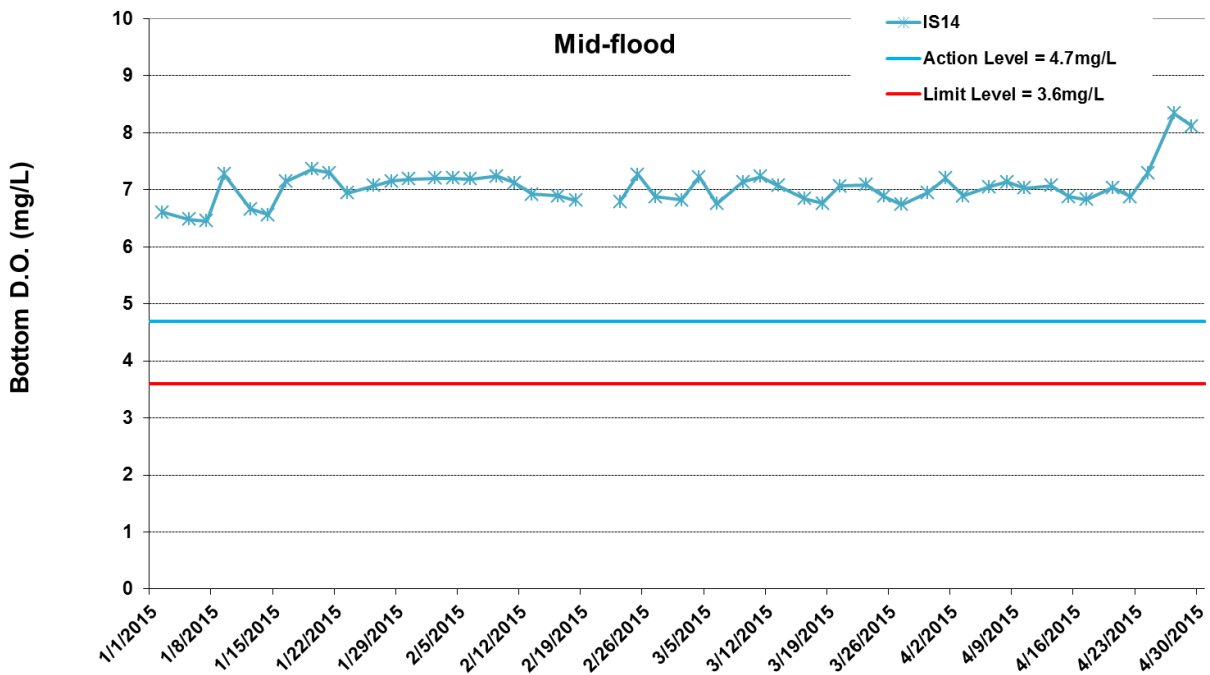
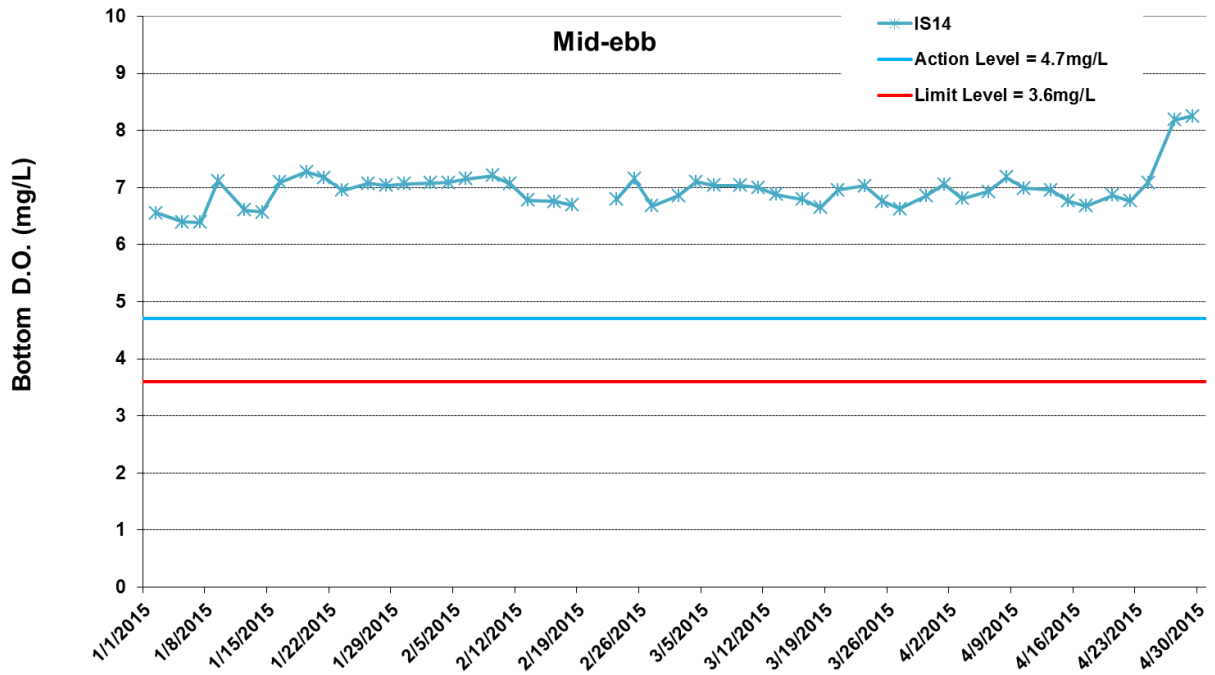


Figure I21 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



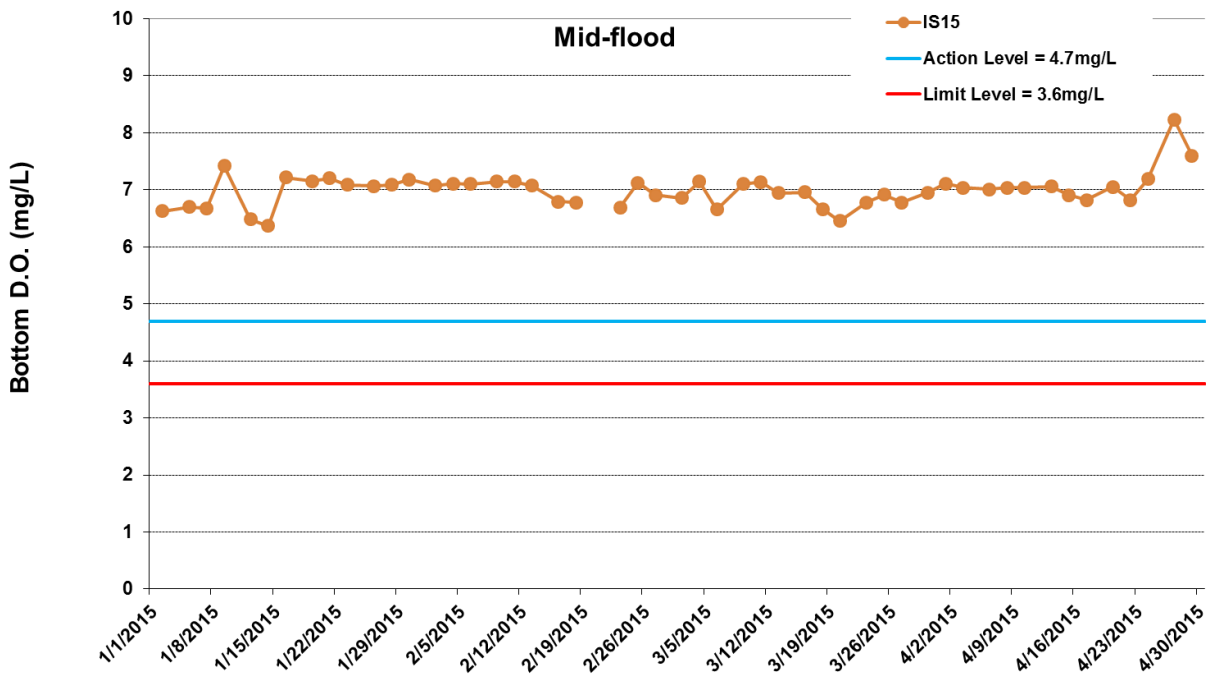
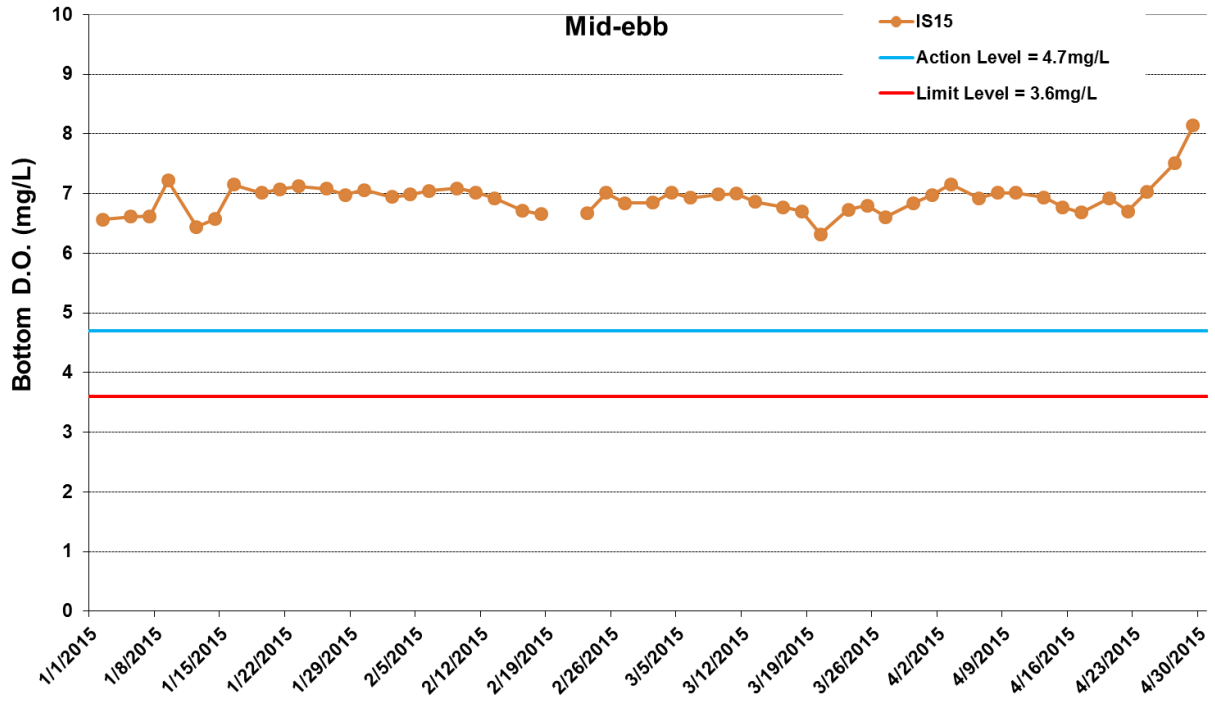


Figure I22 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.





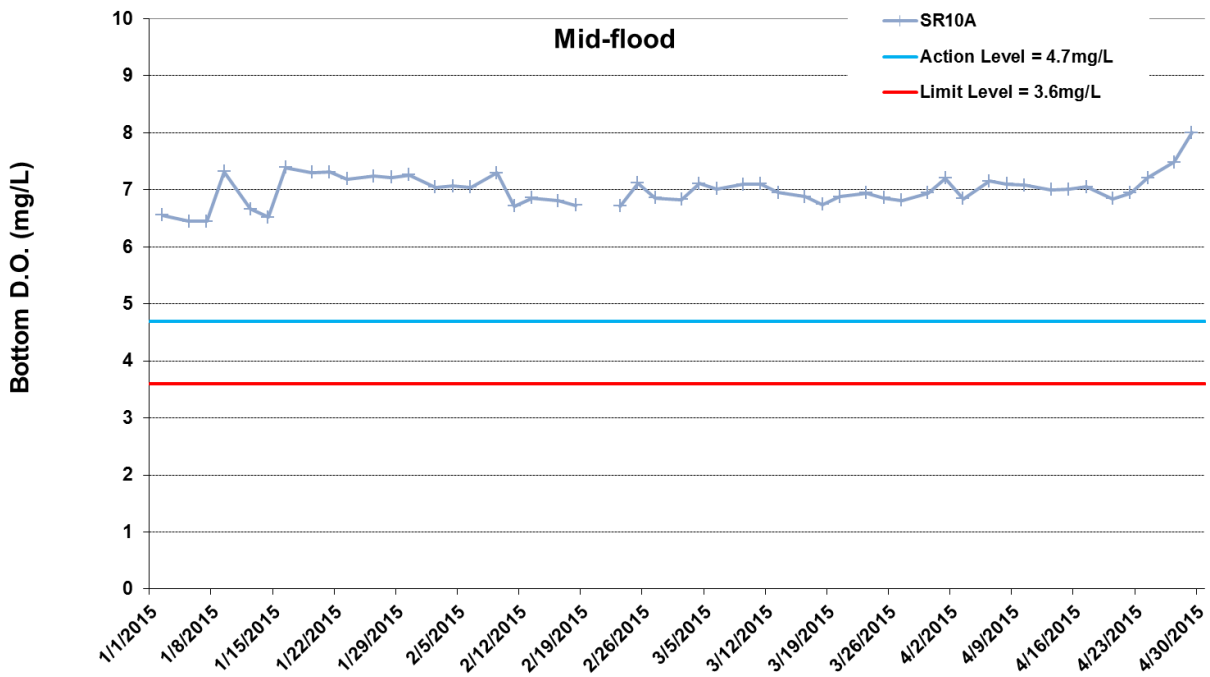
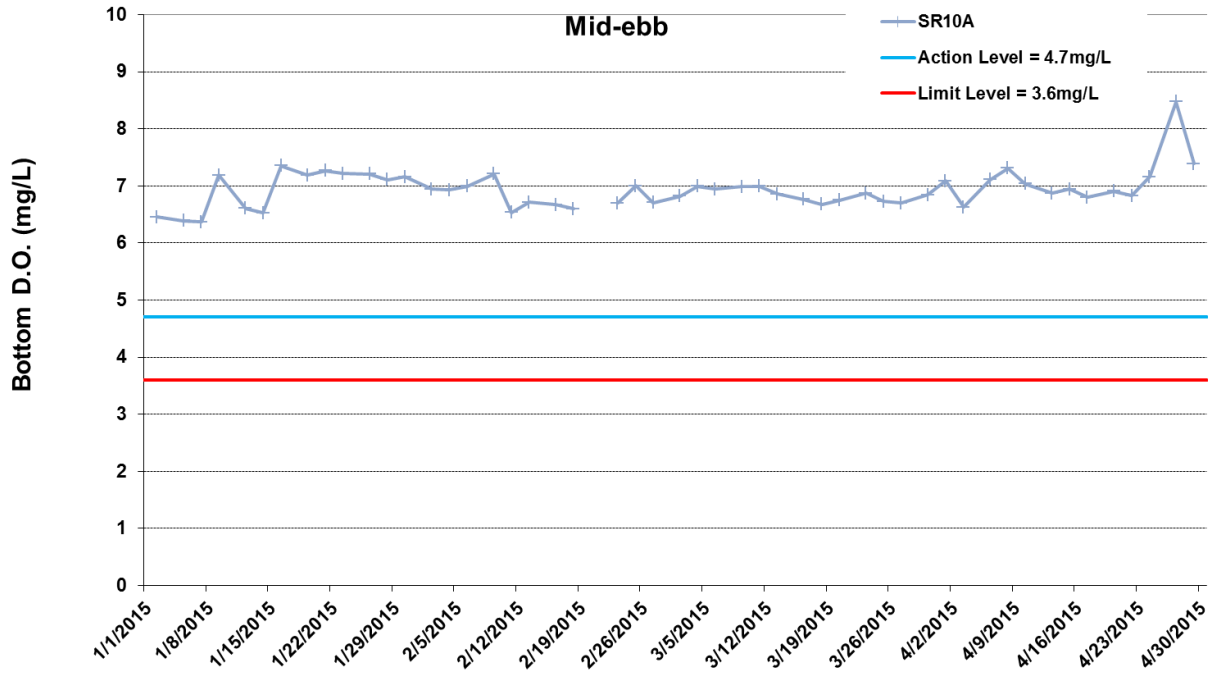


Figure I23 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



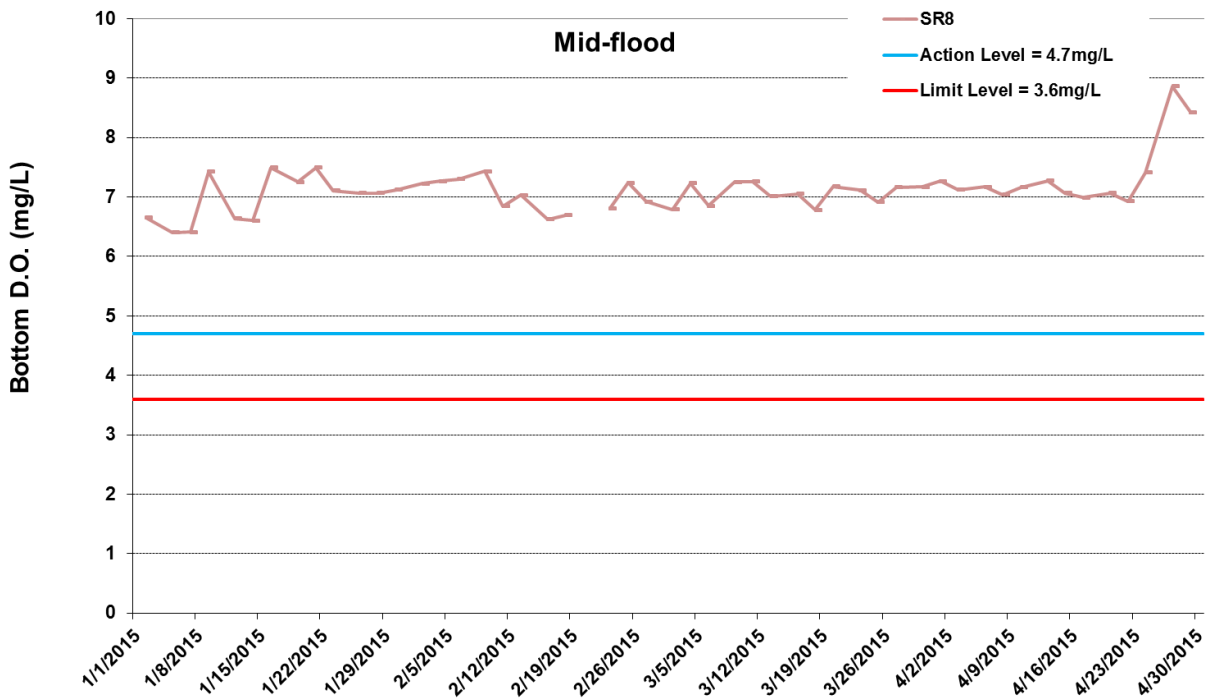
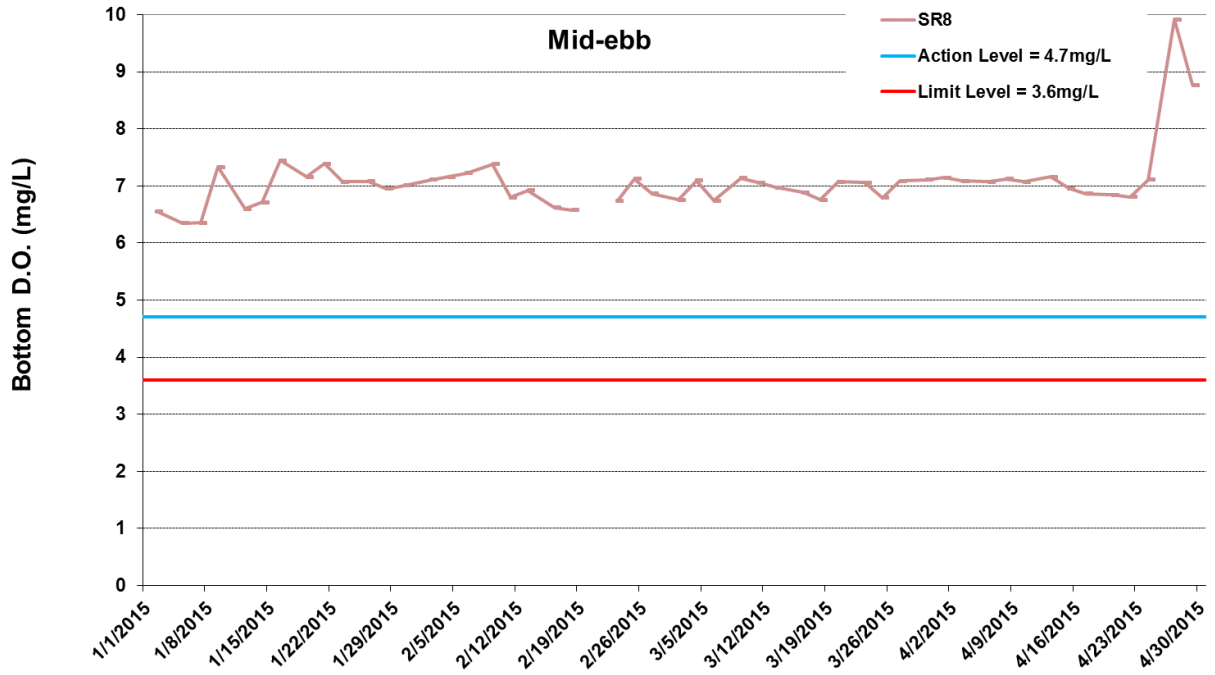


Figure I24 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



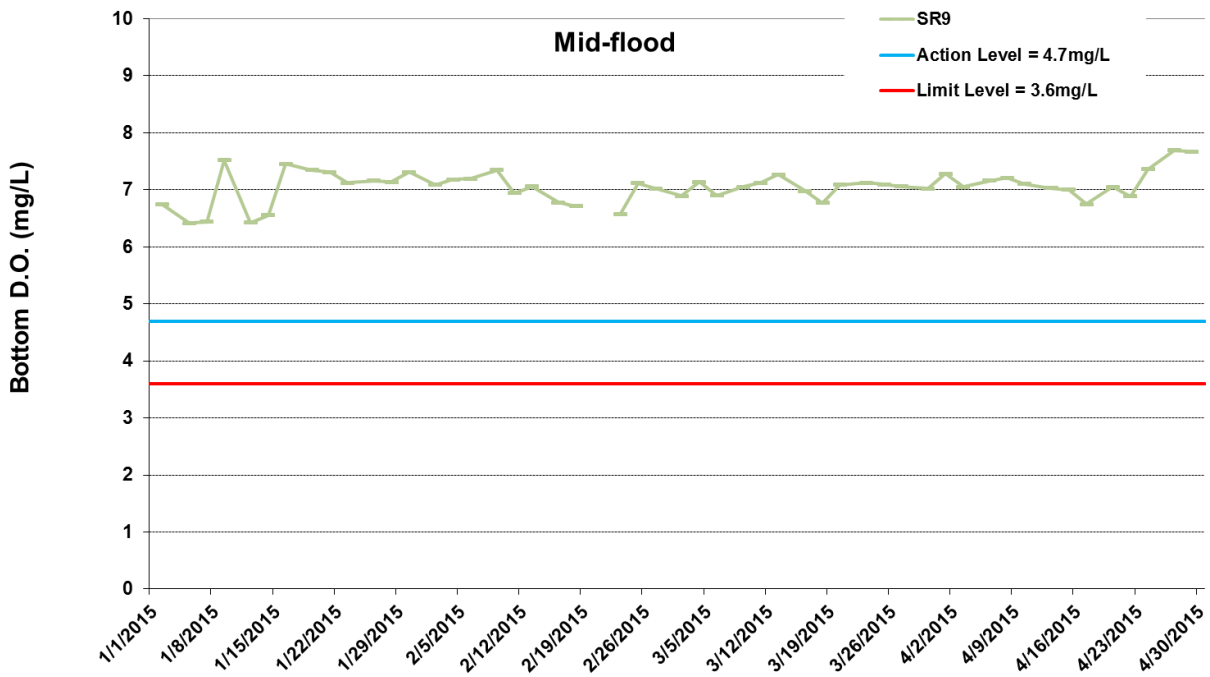
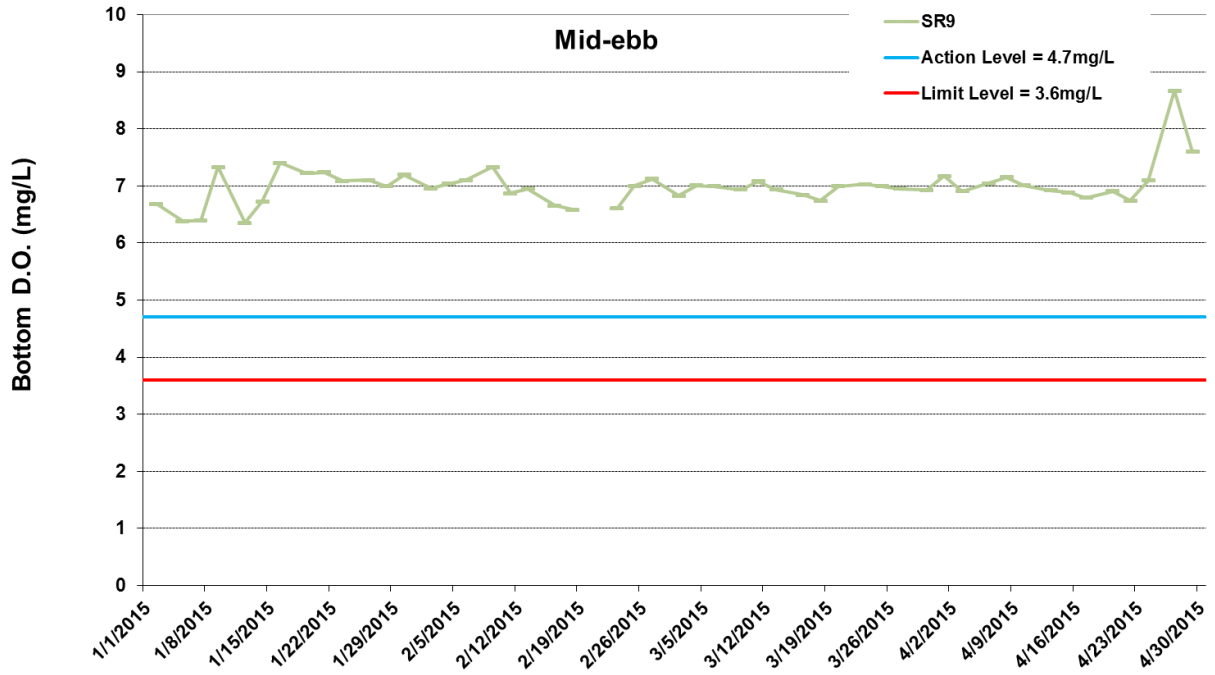


Figure I25 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 January 2015 and 30 April 2015 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



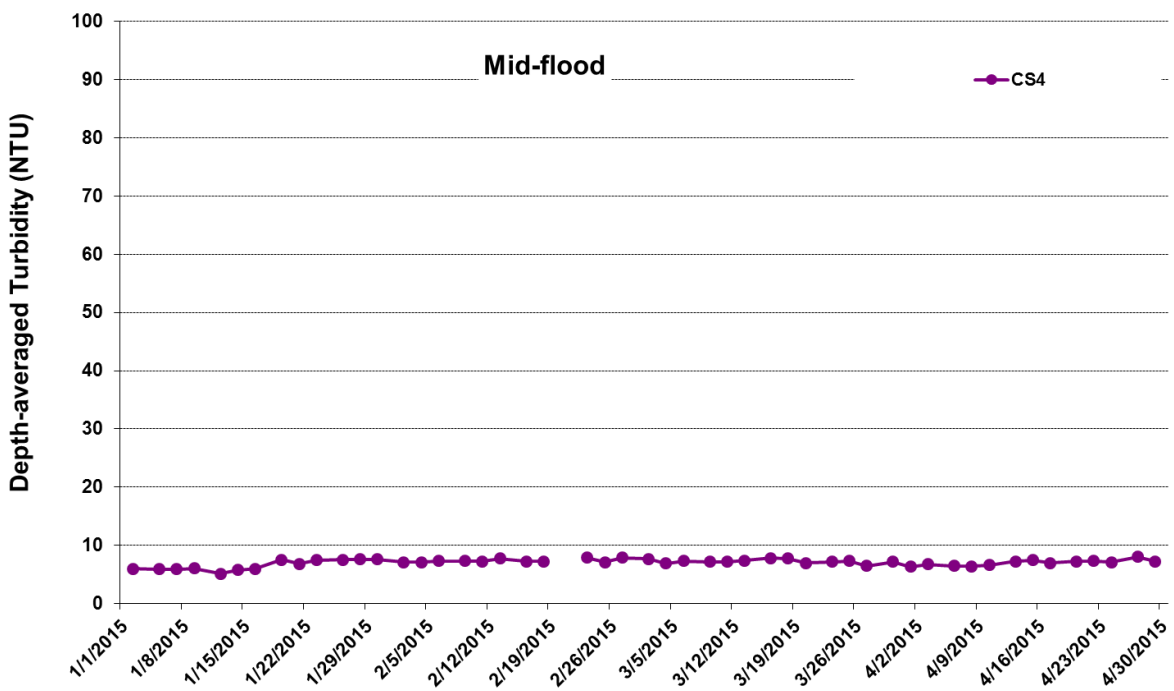
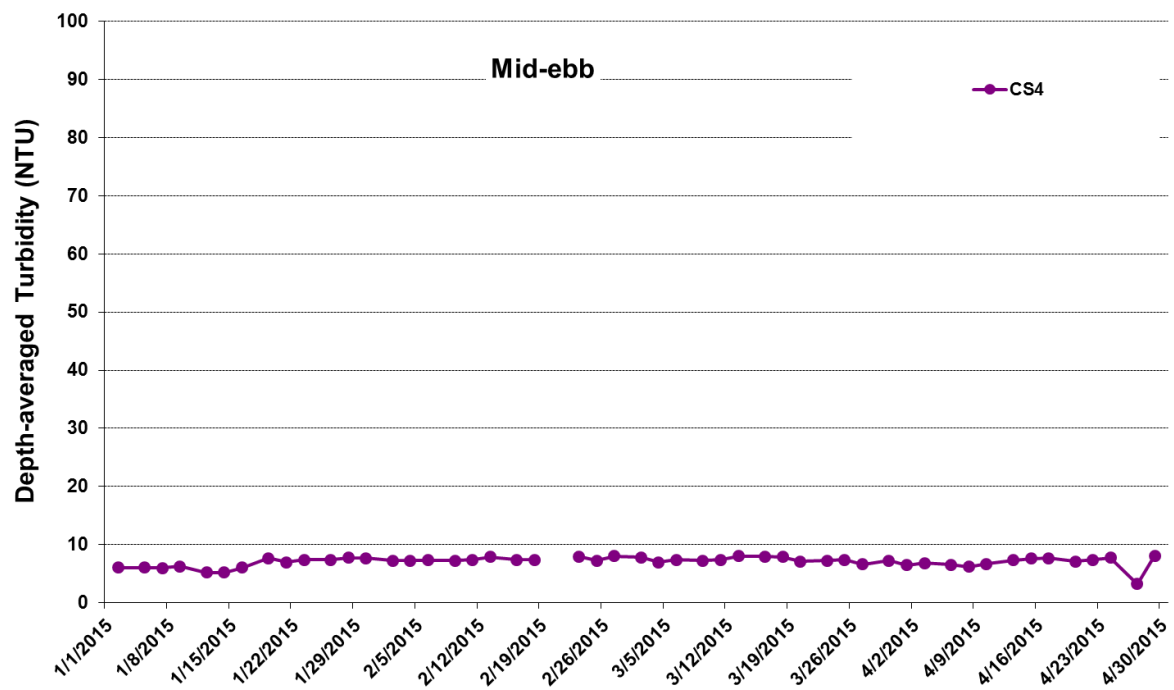


Figure I26 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



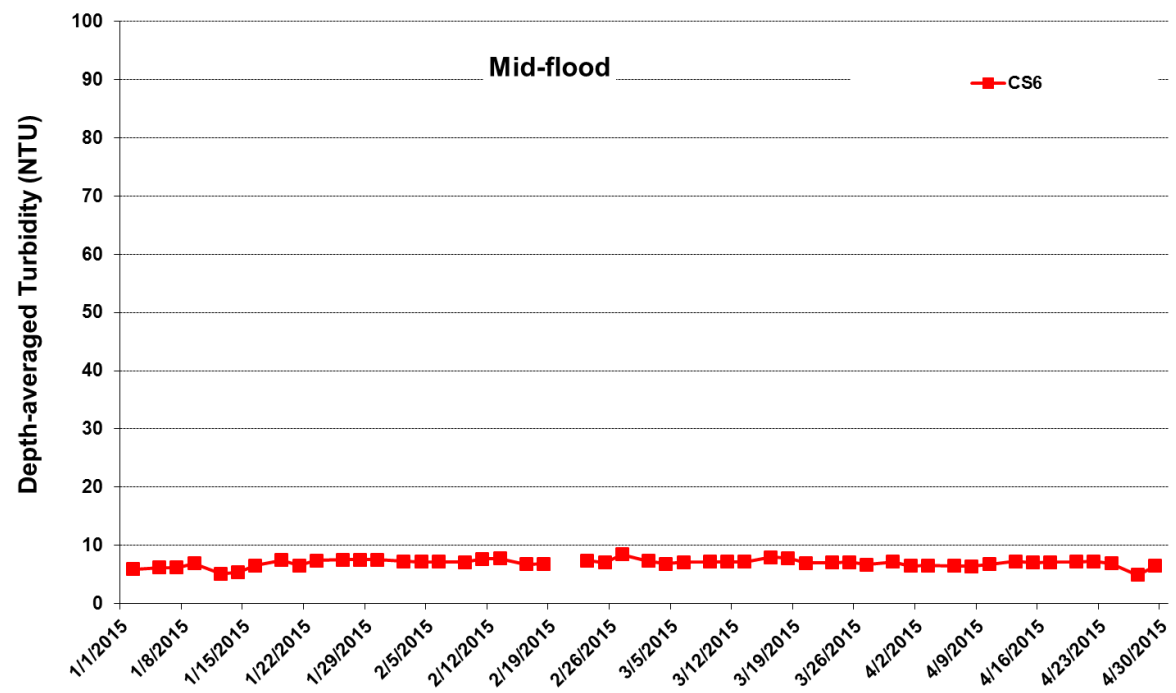
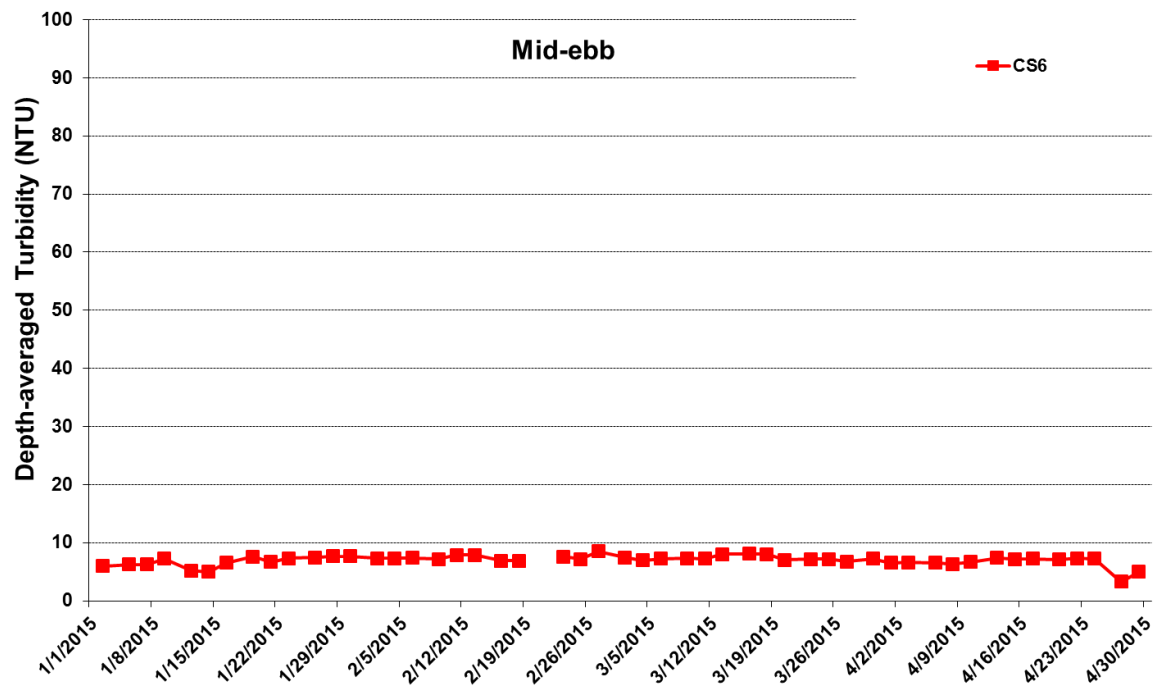


Figure I27 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



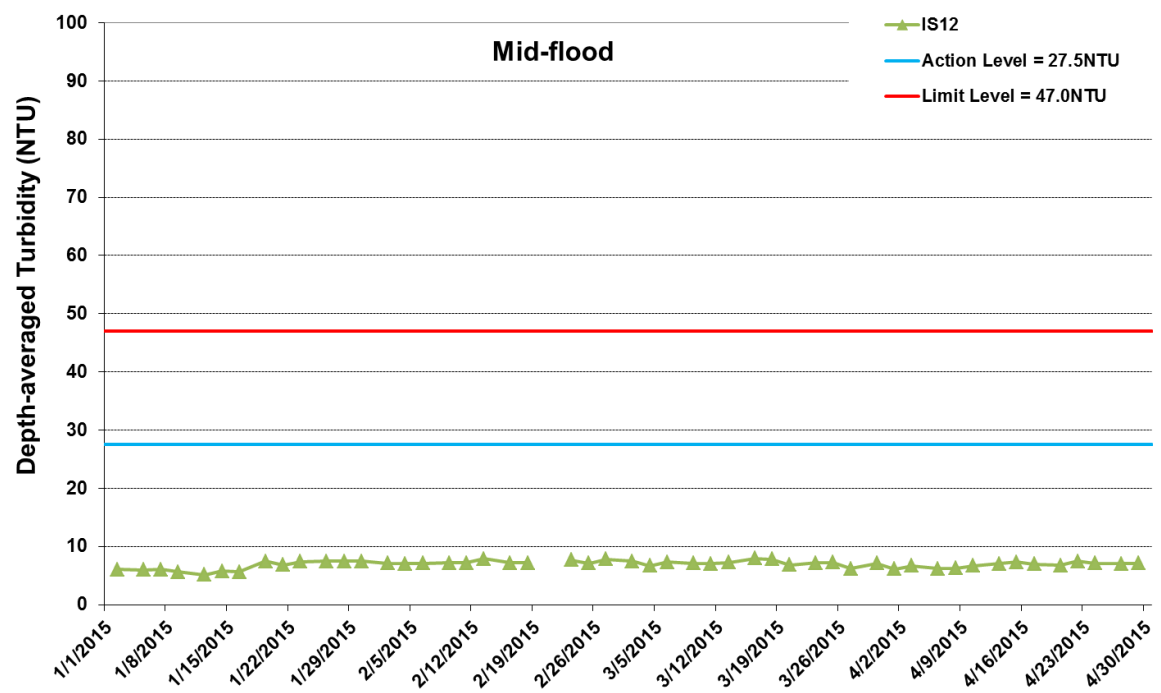
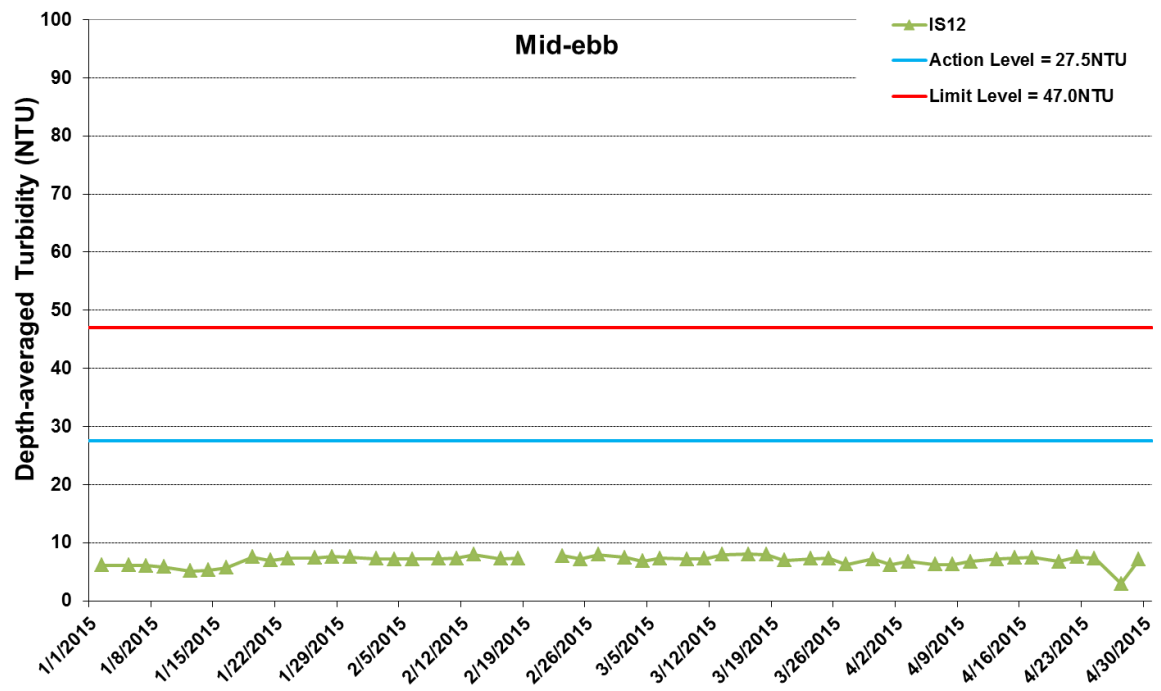


Figure I28 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



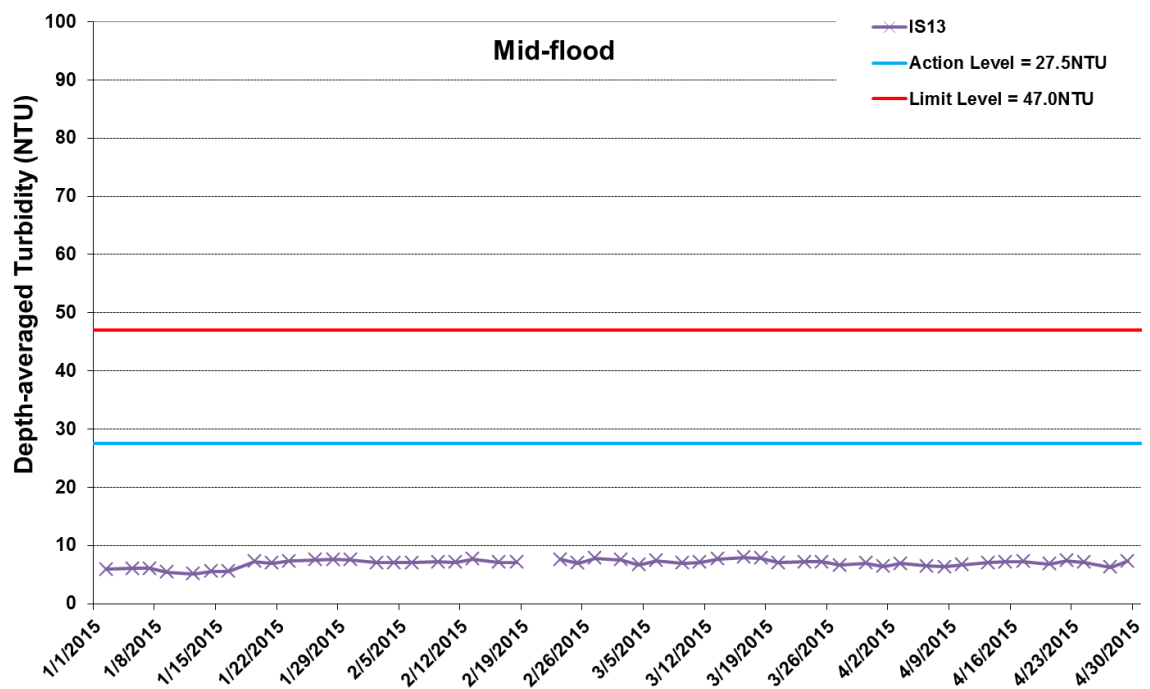
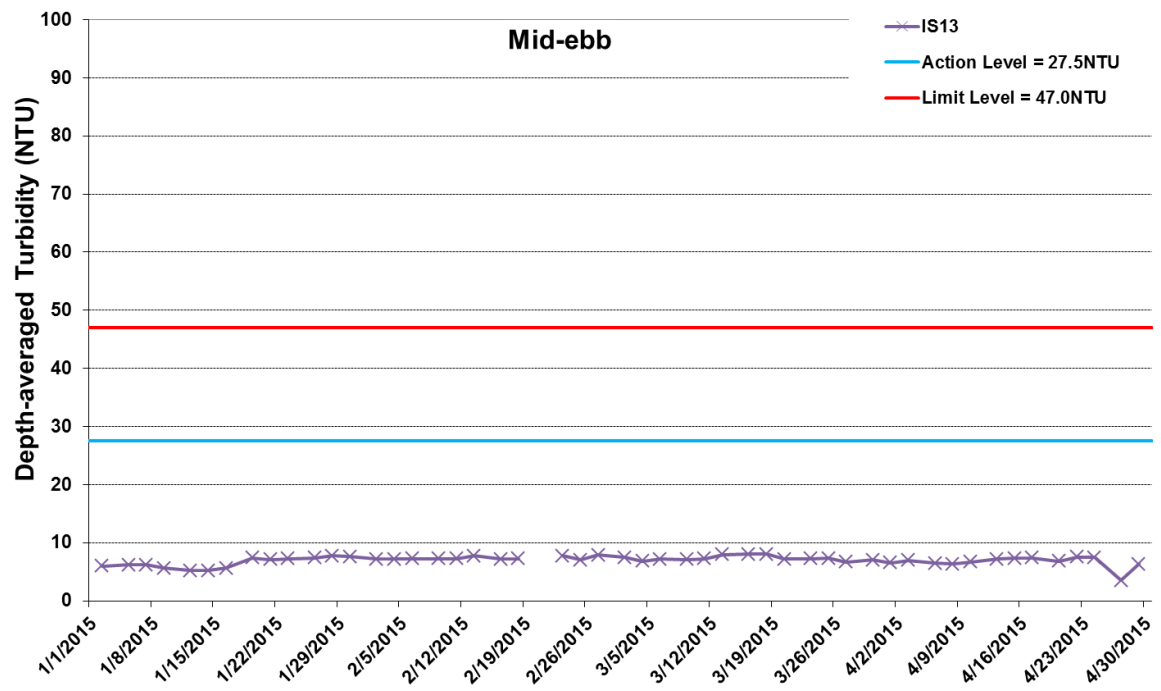


Figure I29 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



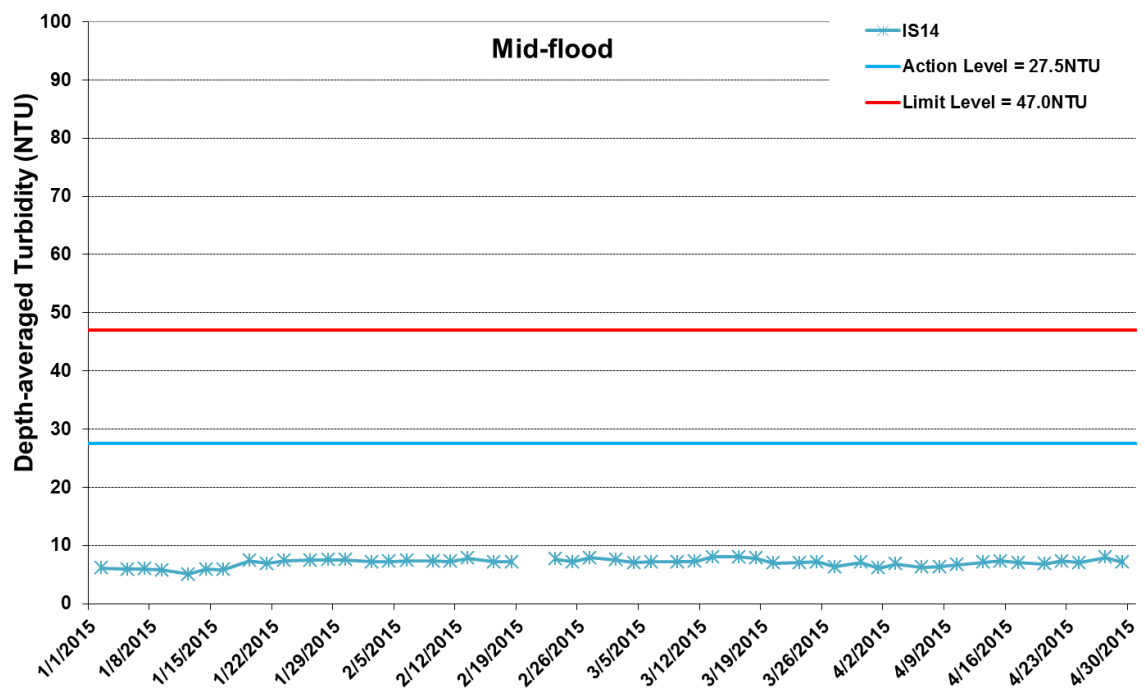
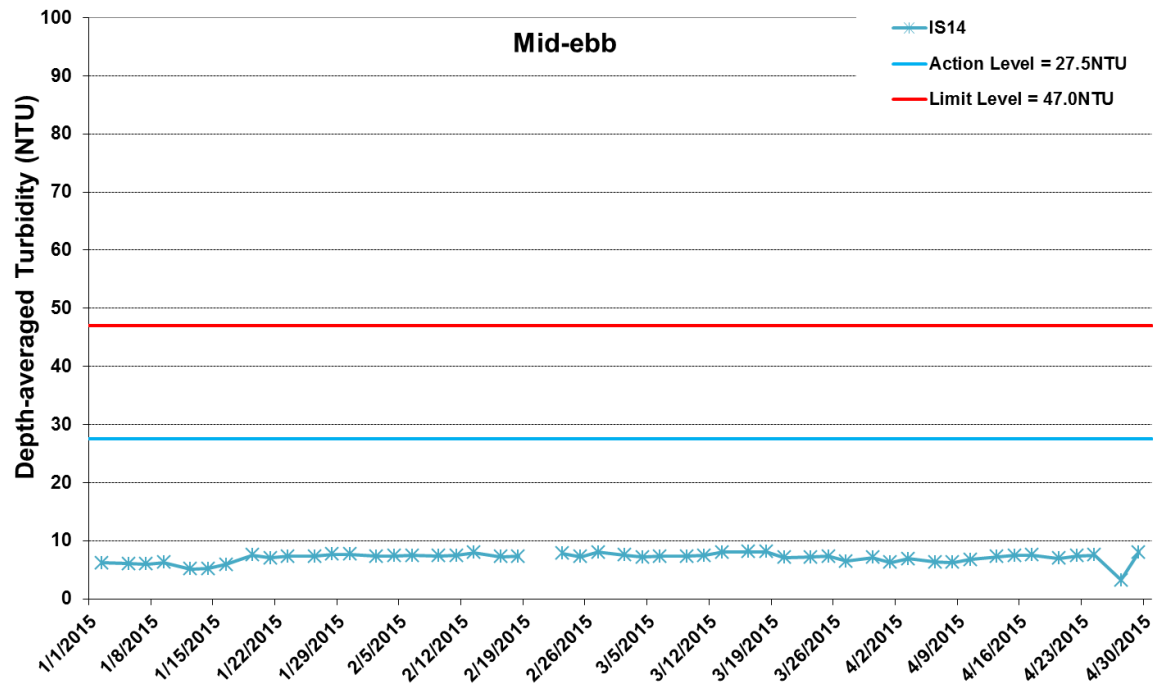


Figure I30 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.





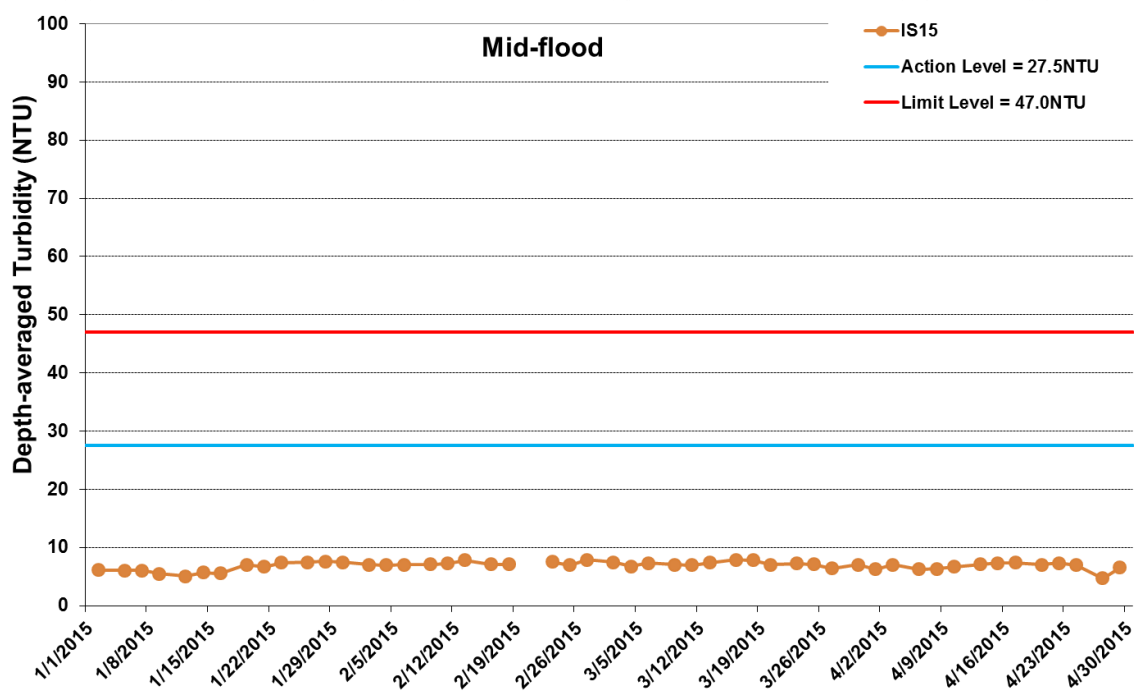
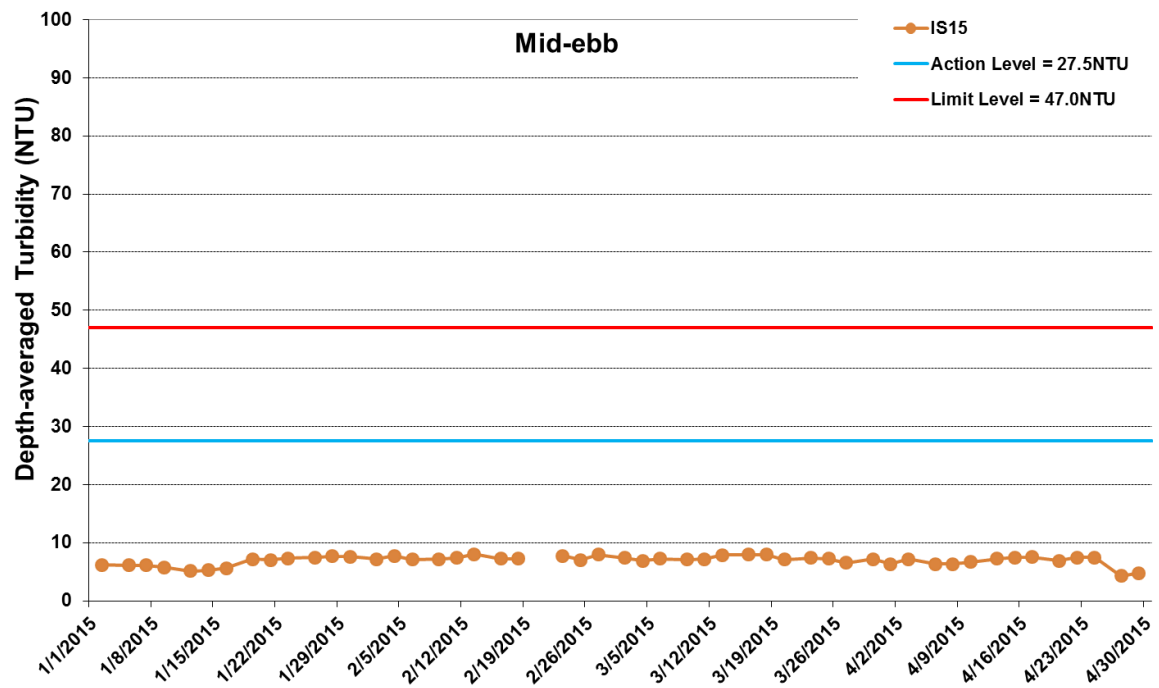


Figure I31 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



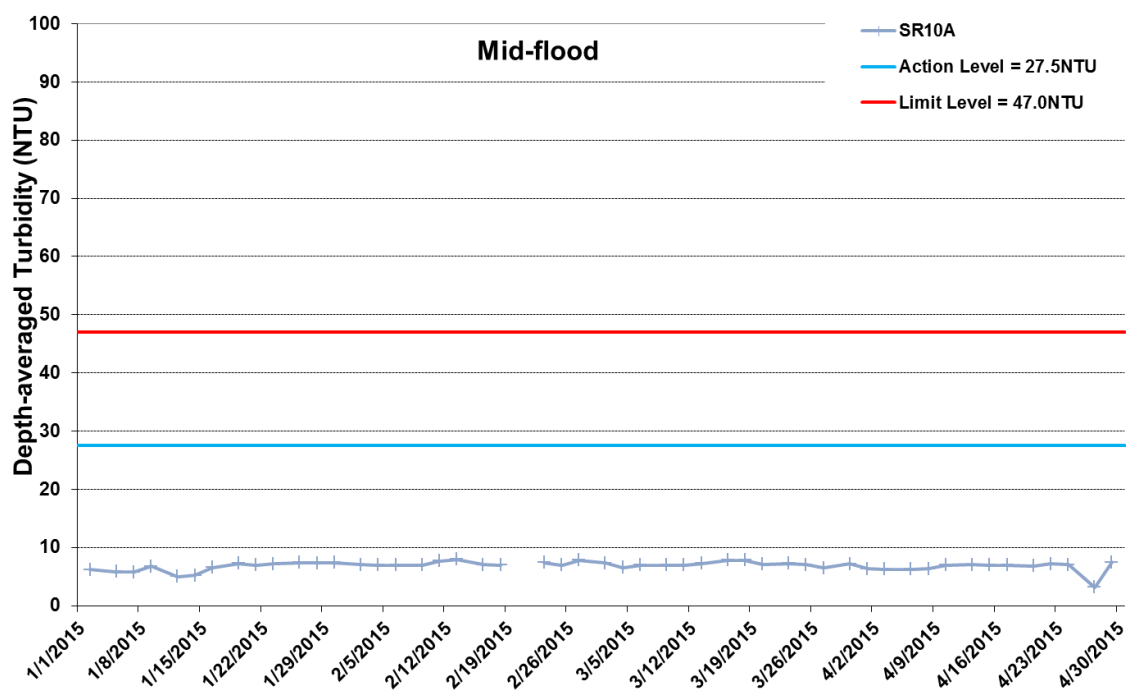
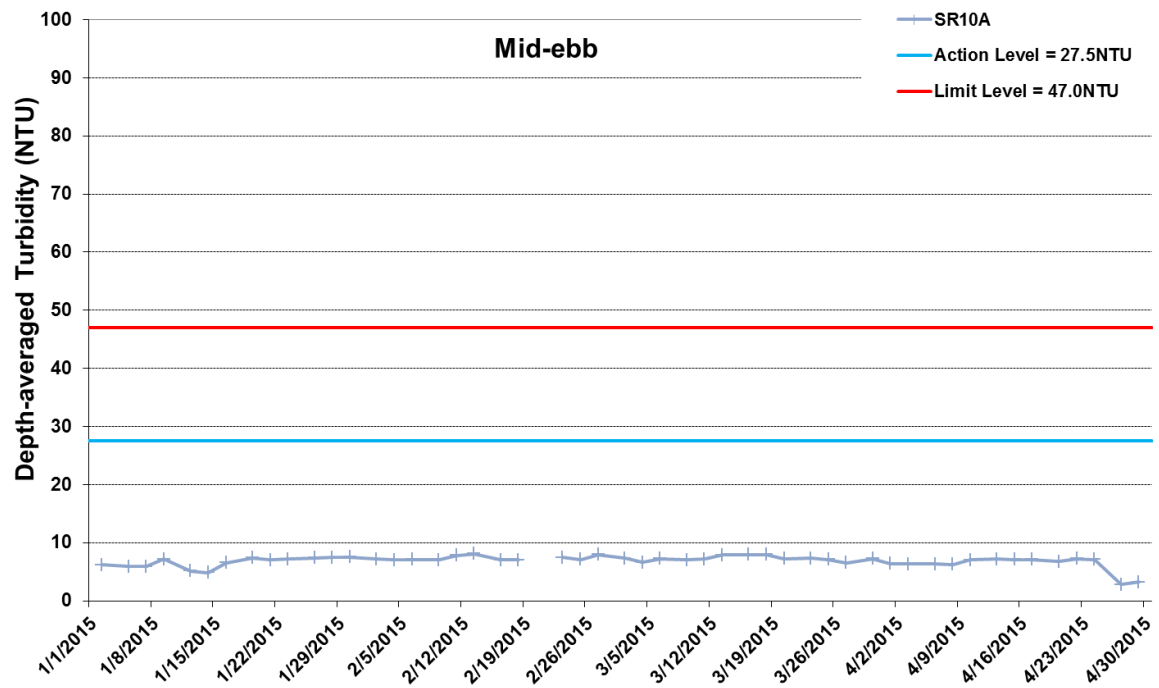


Figure I32 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



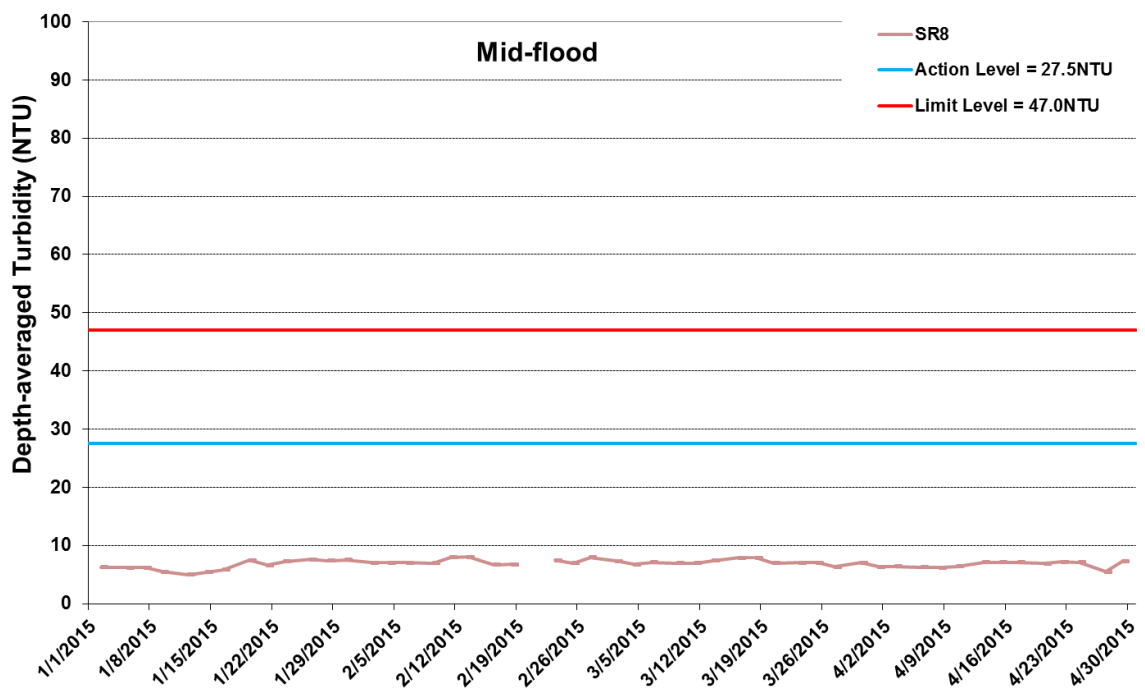
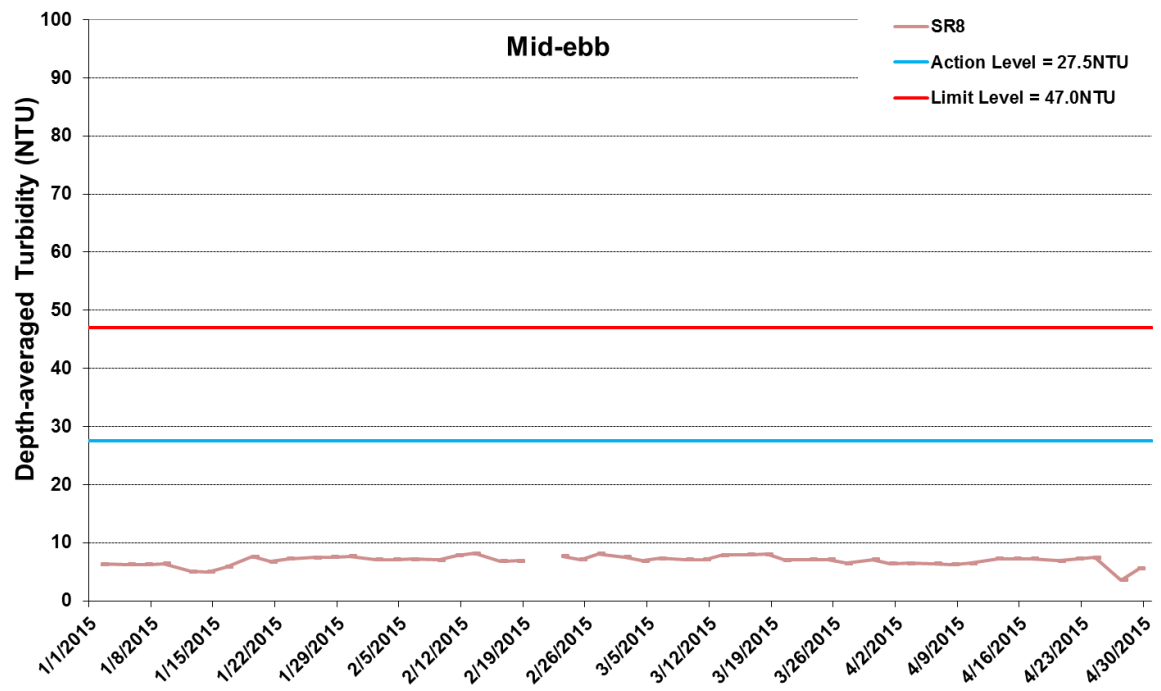


Figure I33 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



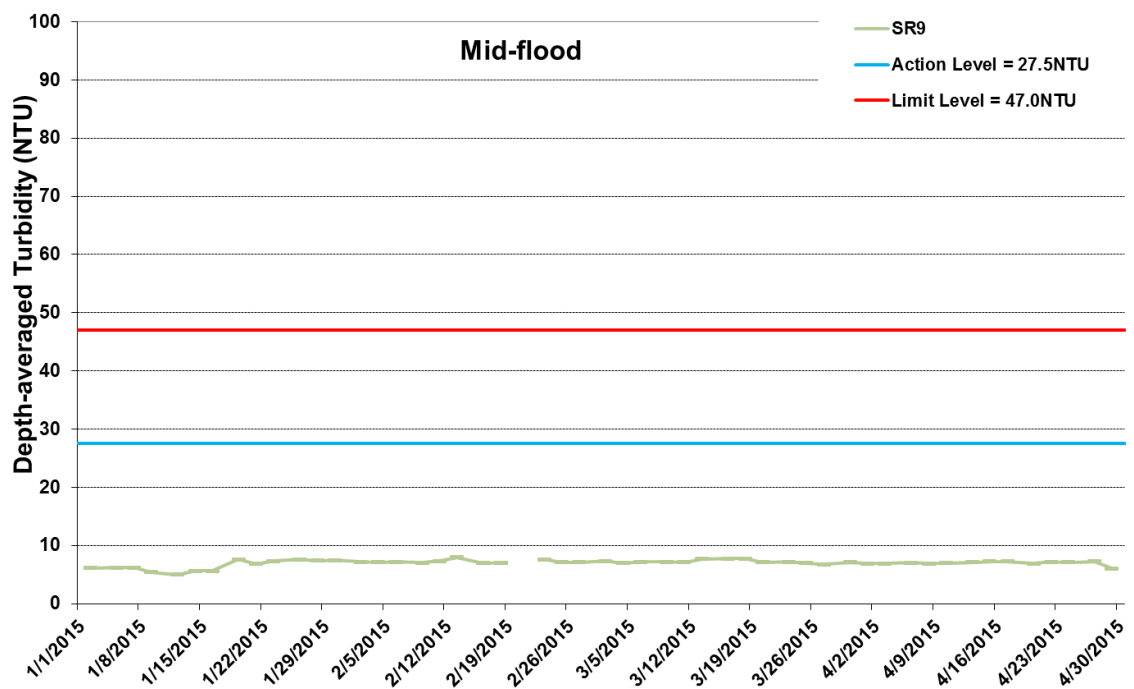
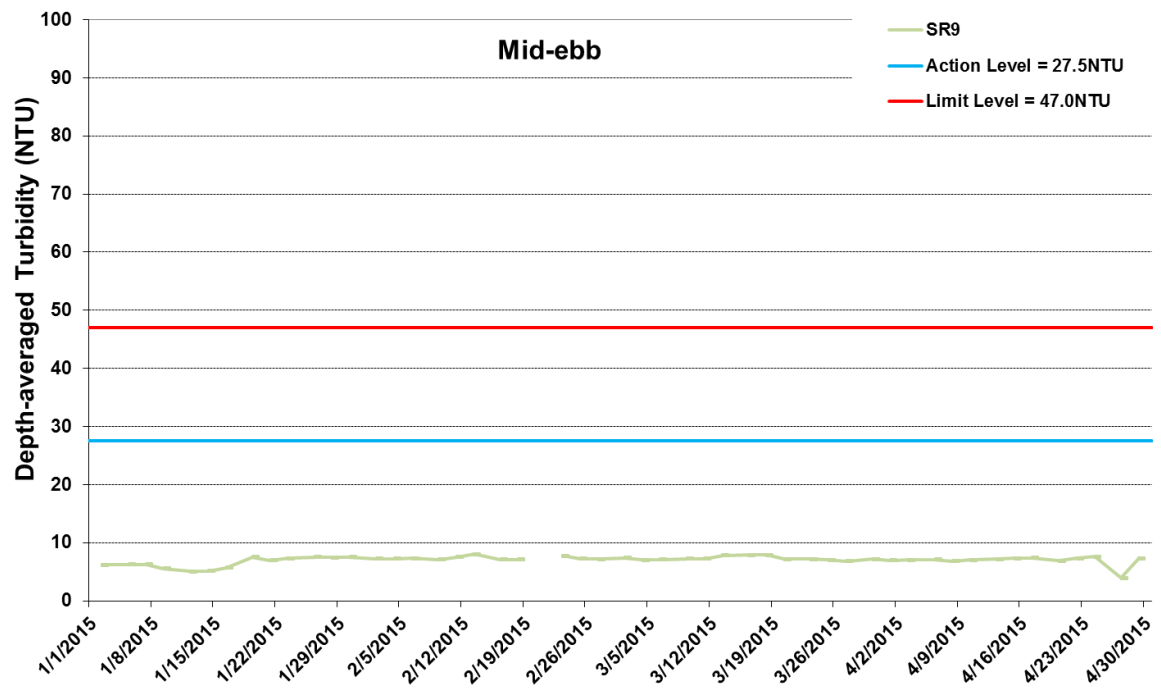


Figure I34 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 January 2015 and 30 April 2015 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



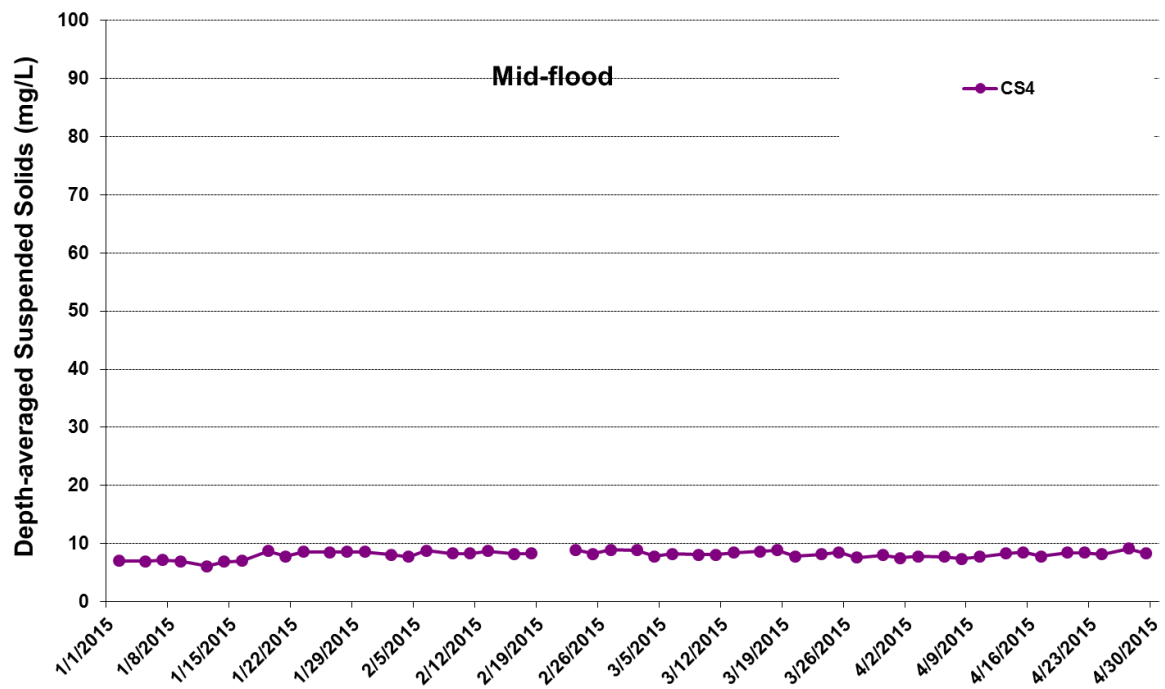
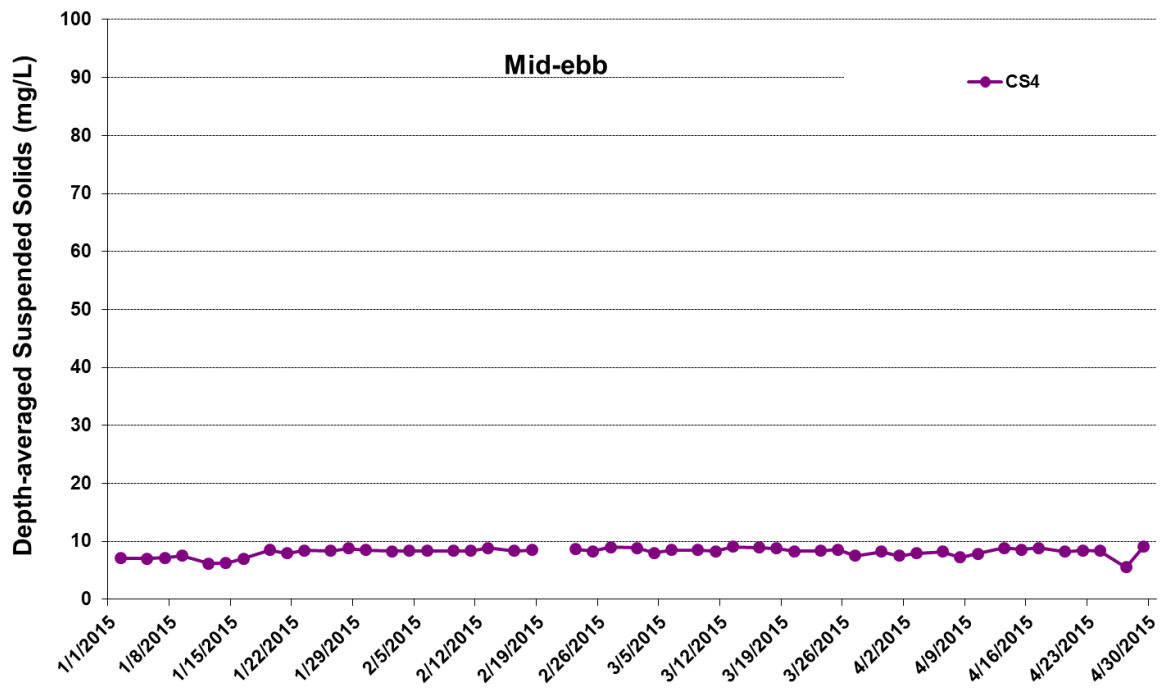


Figure I35 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



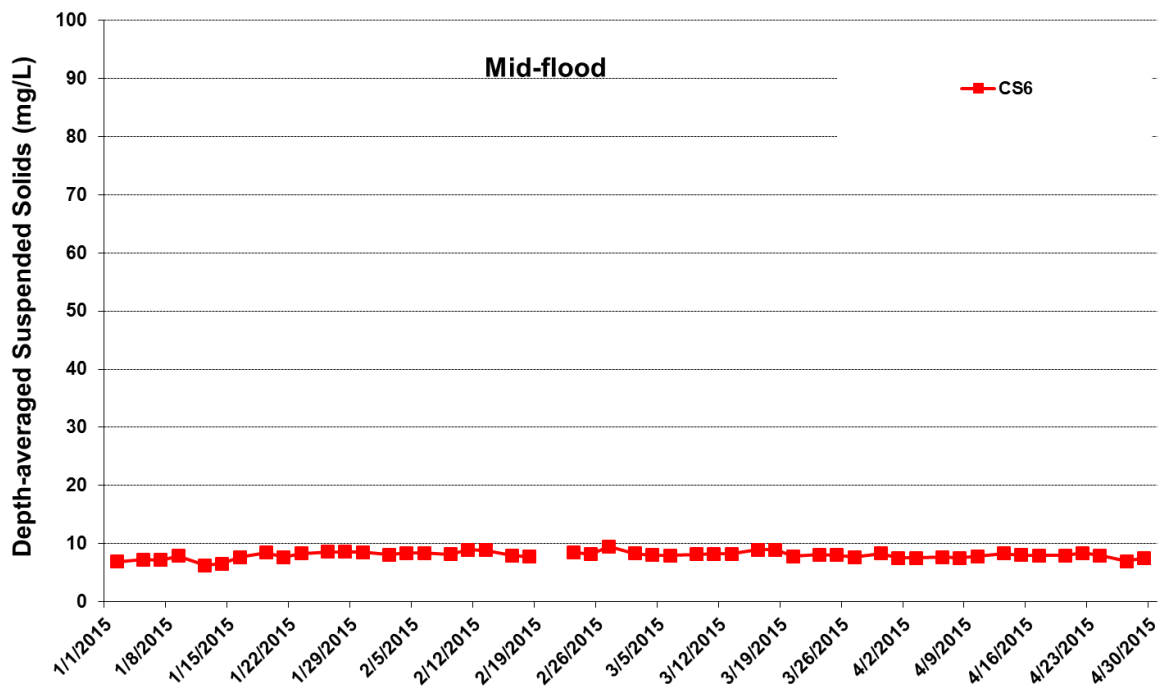
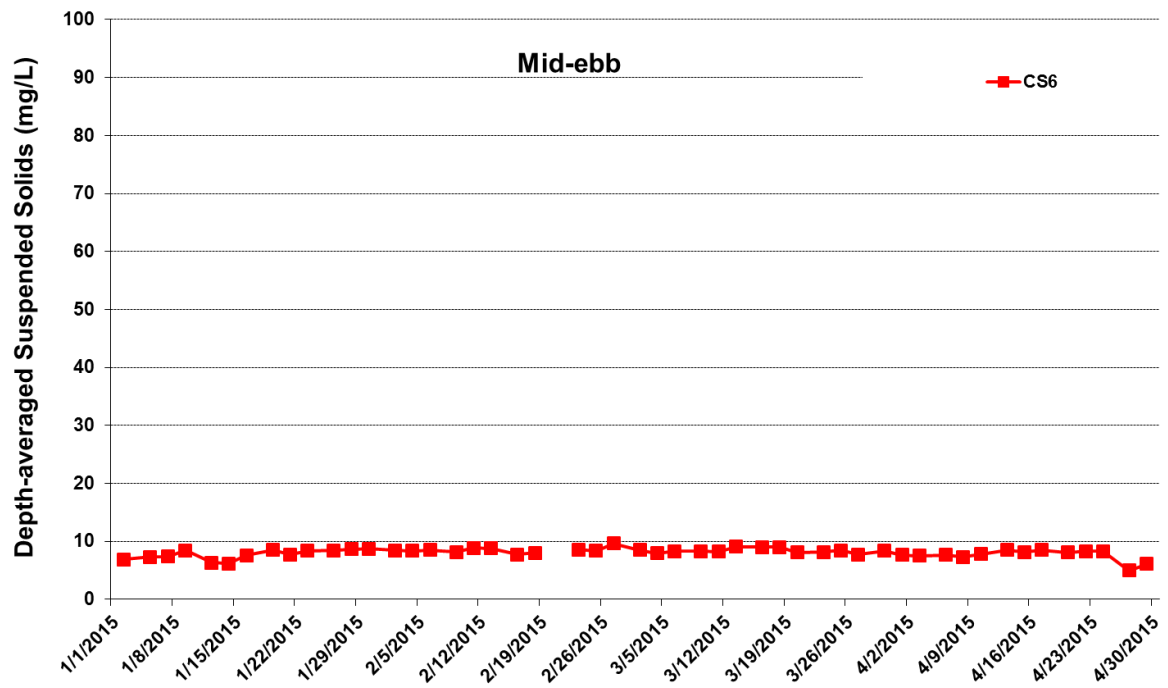


Figure I36 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



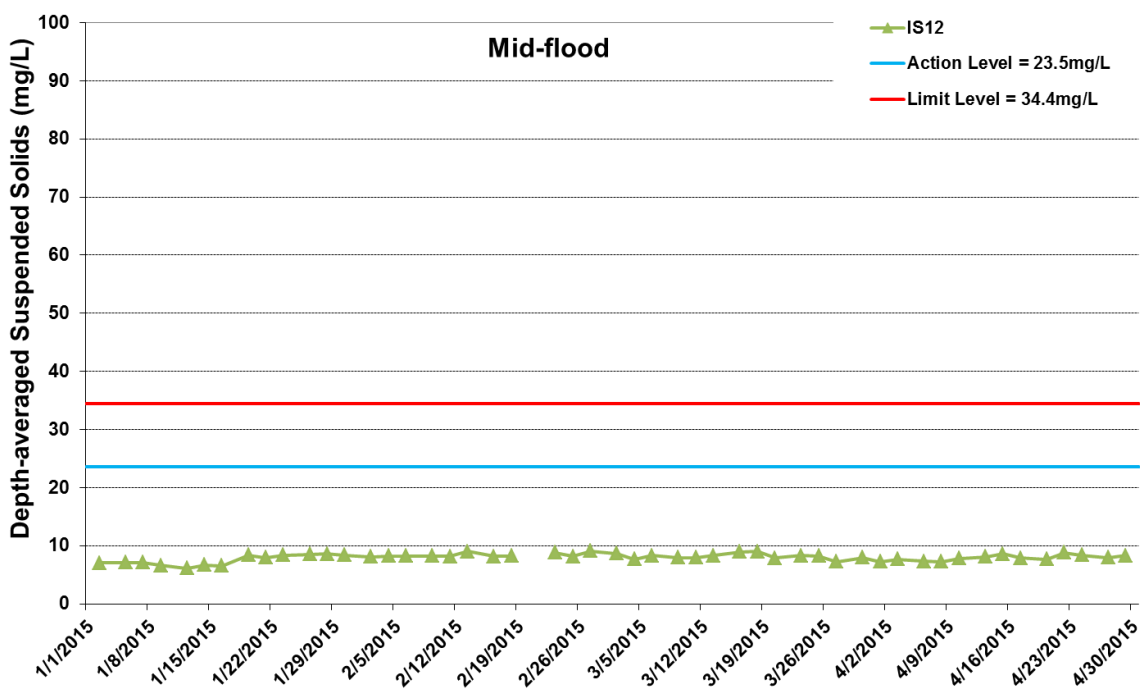
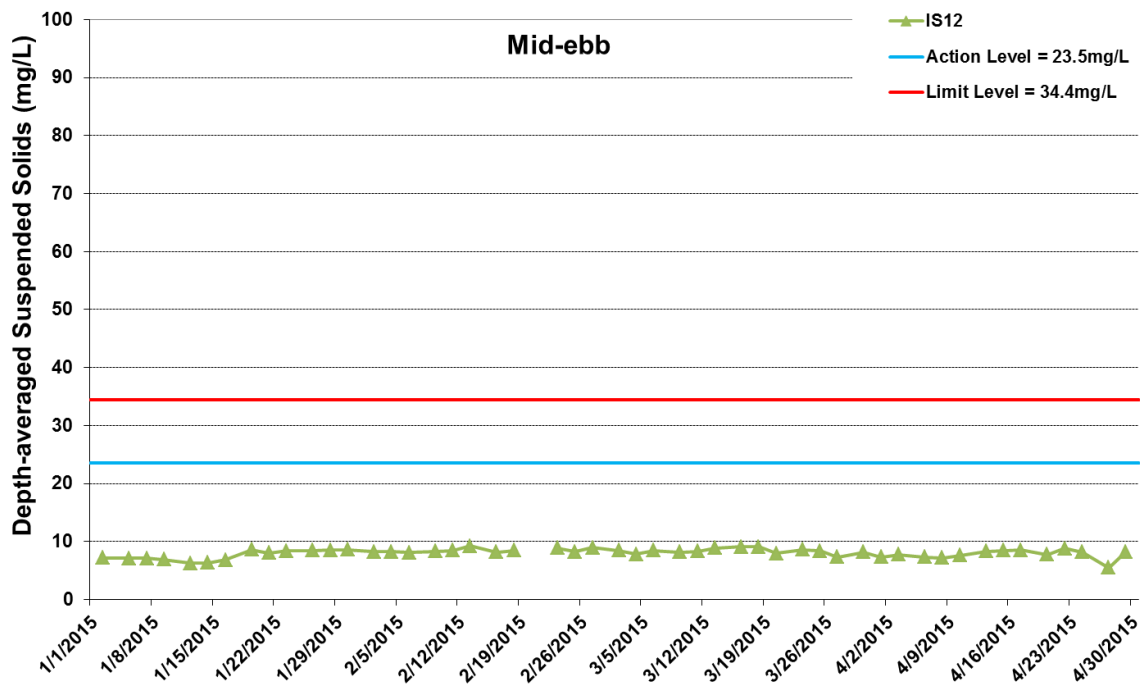


Figure I37 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



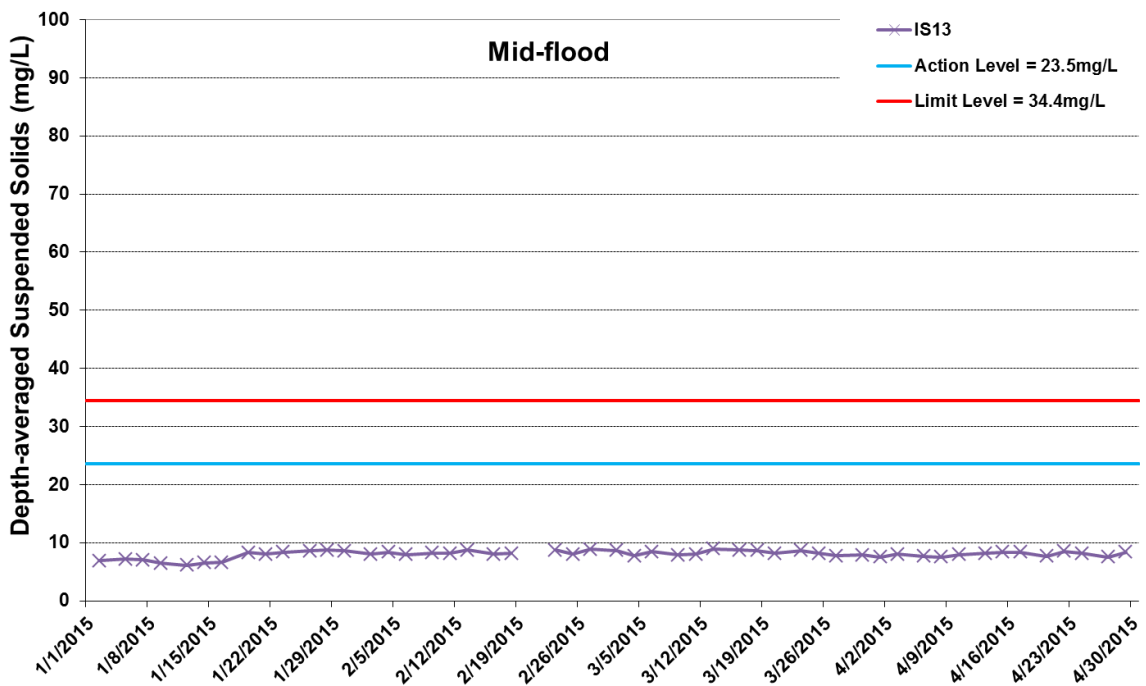
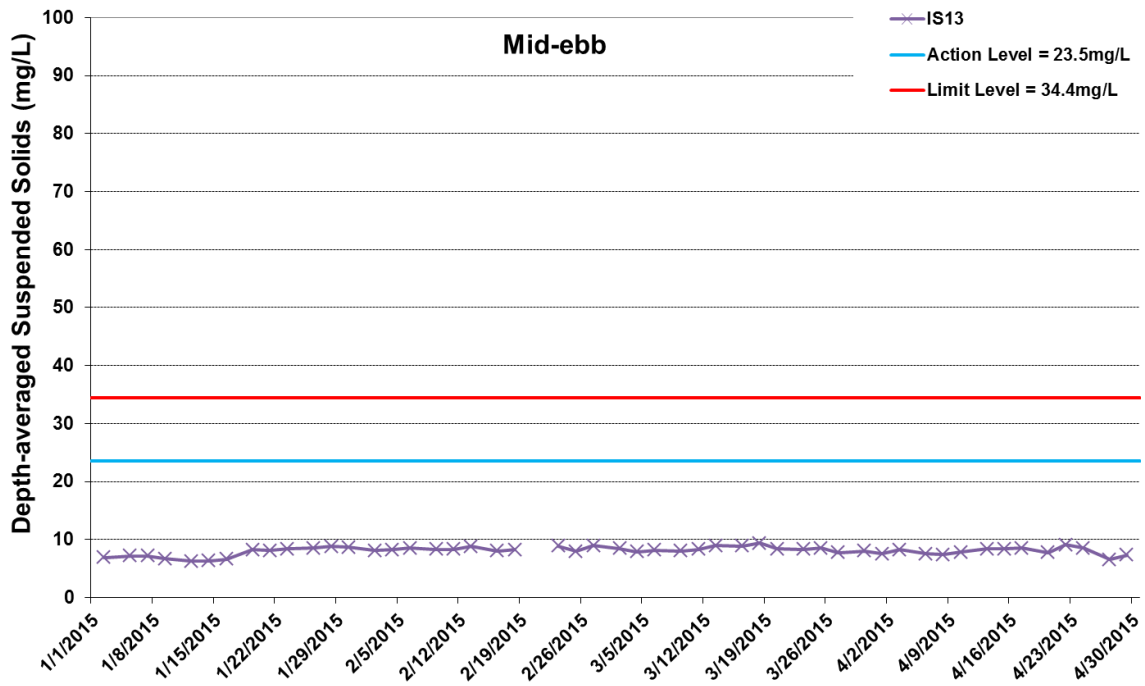


Figure I38 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.





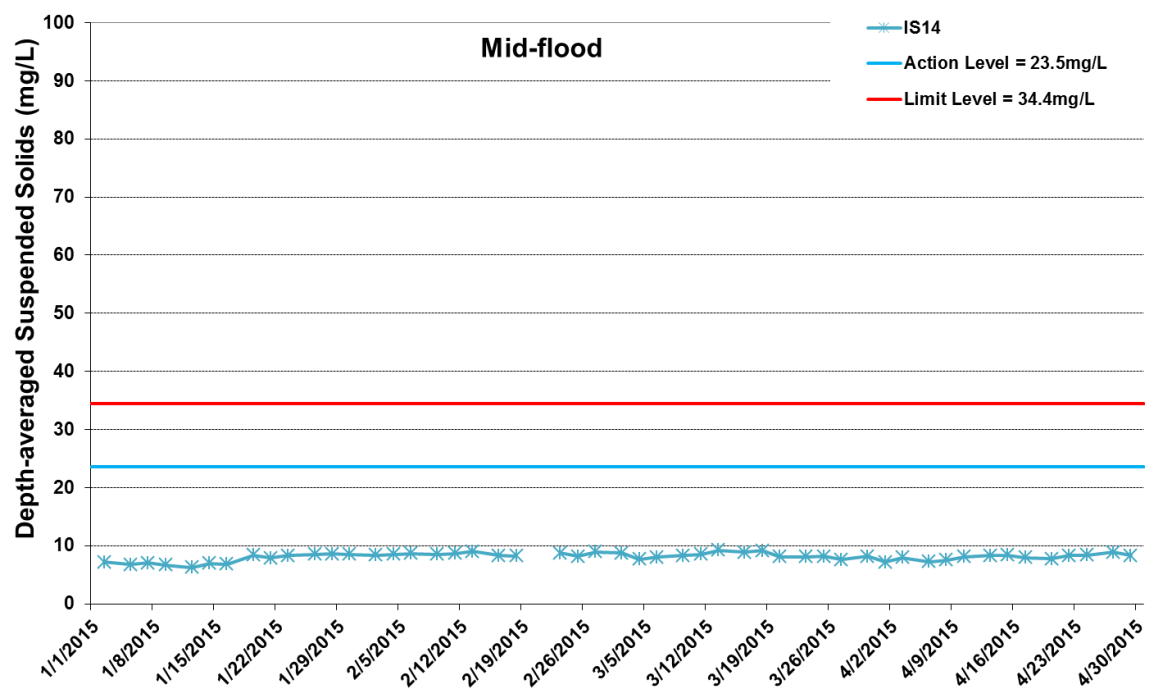
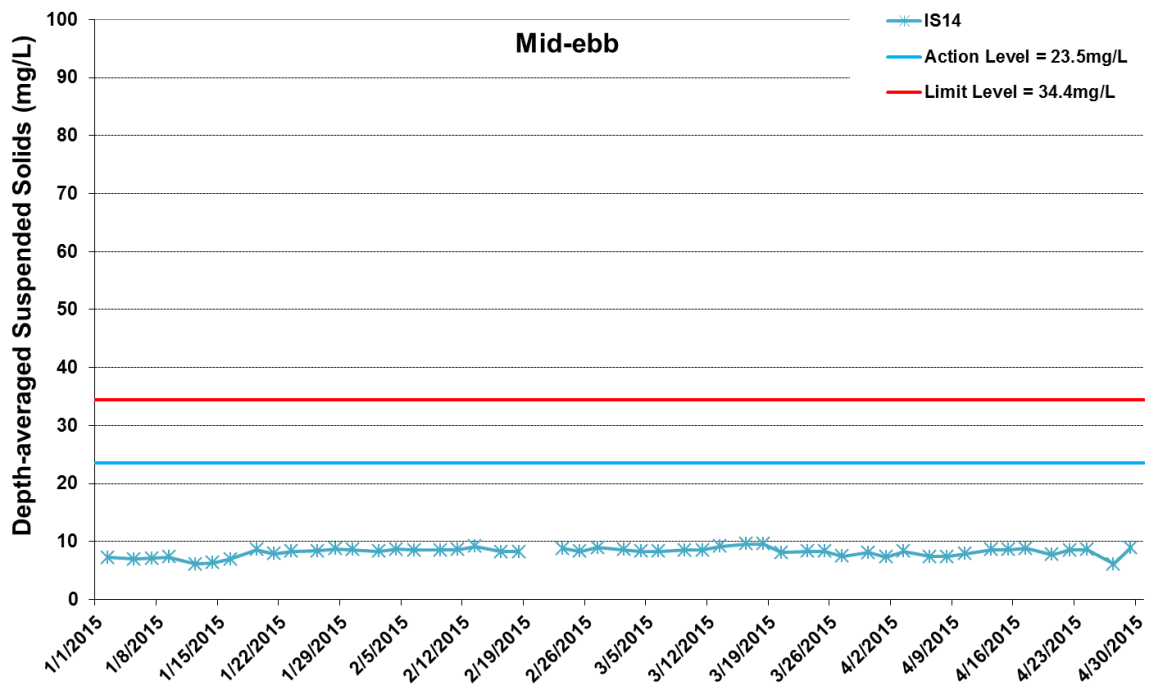


Figure I39 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



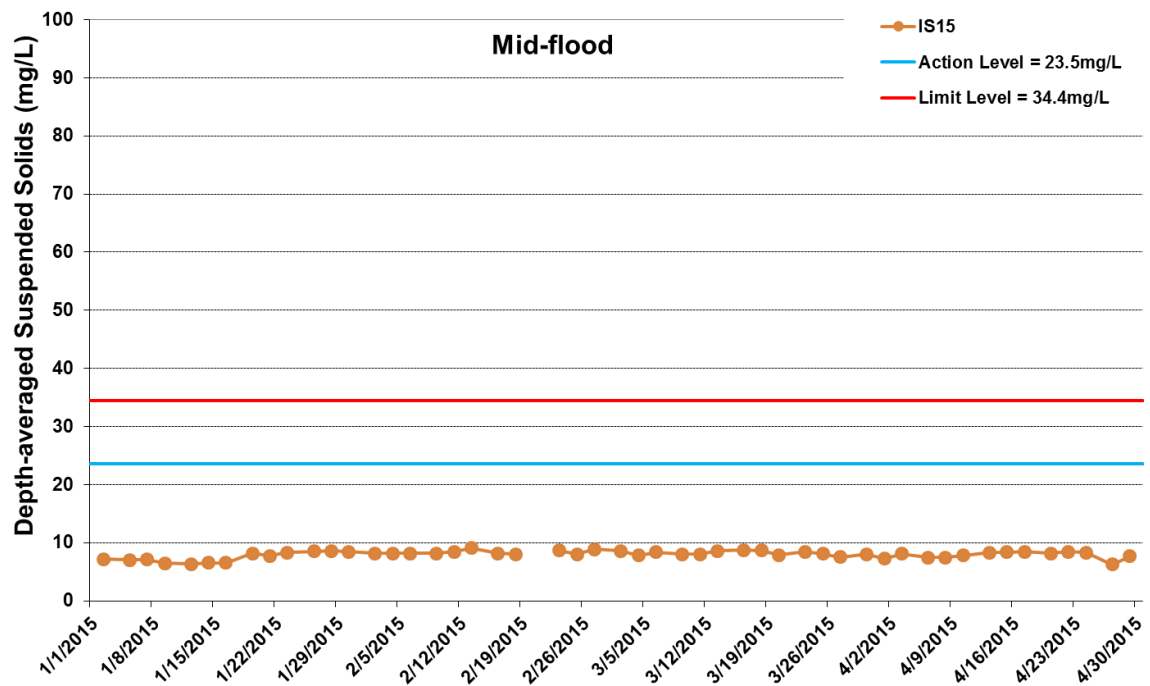
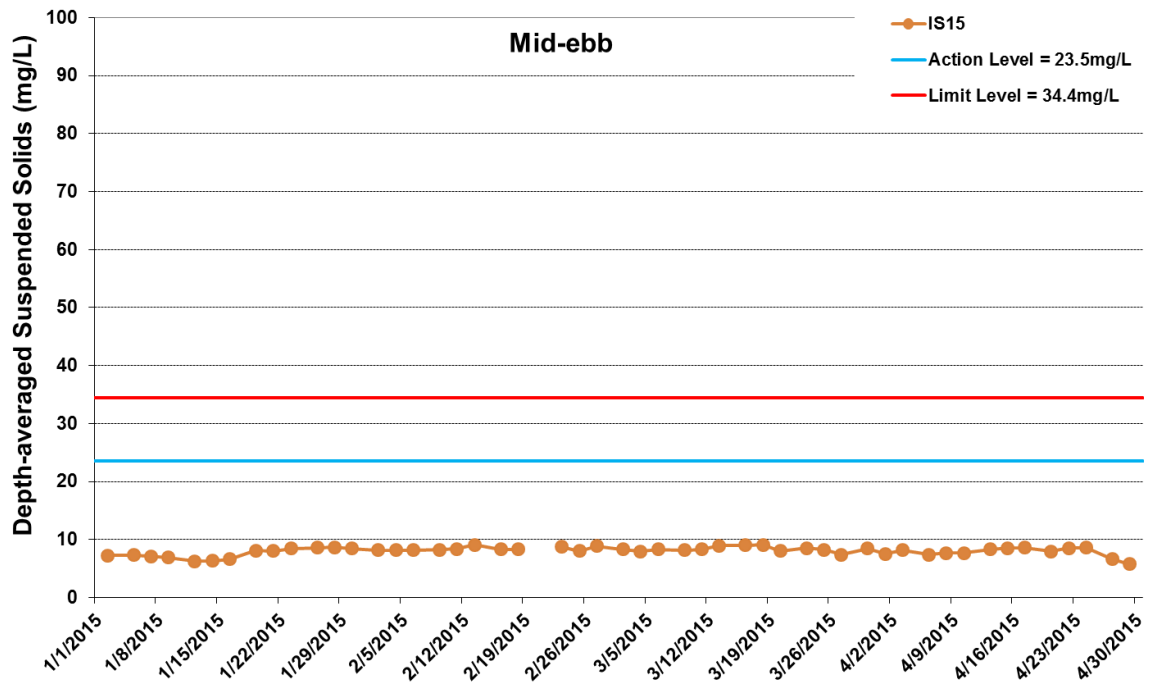


Figure I40 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



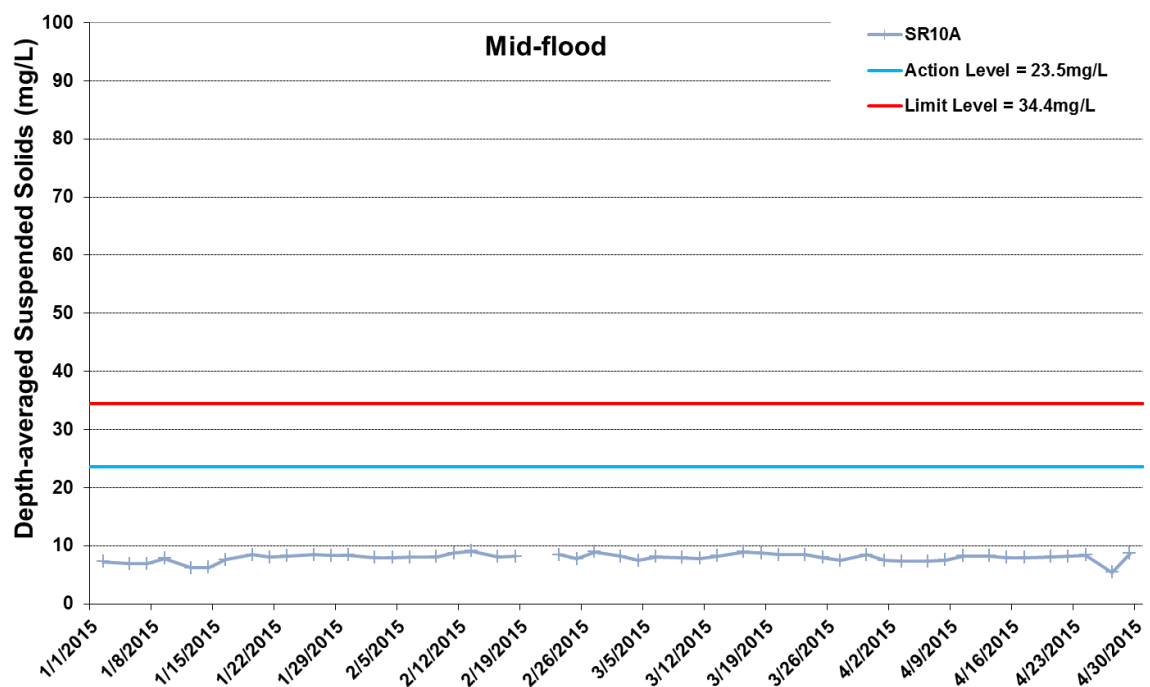
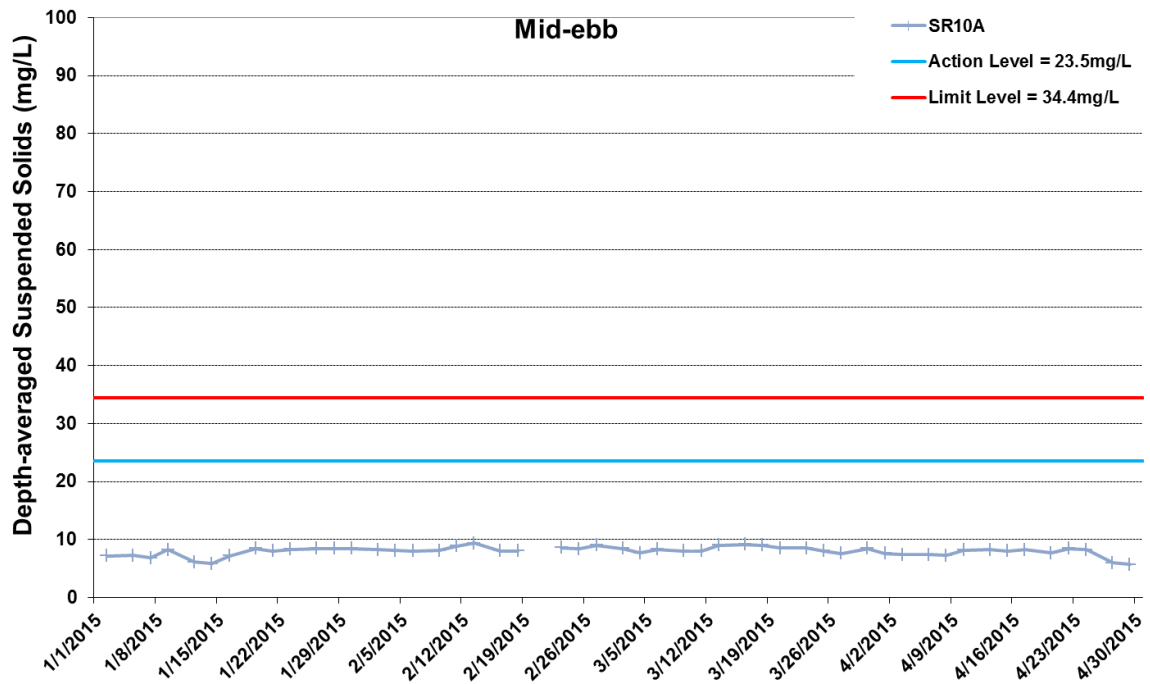


Figure I41 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



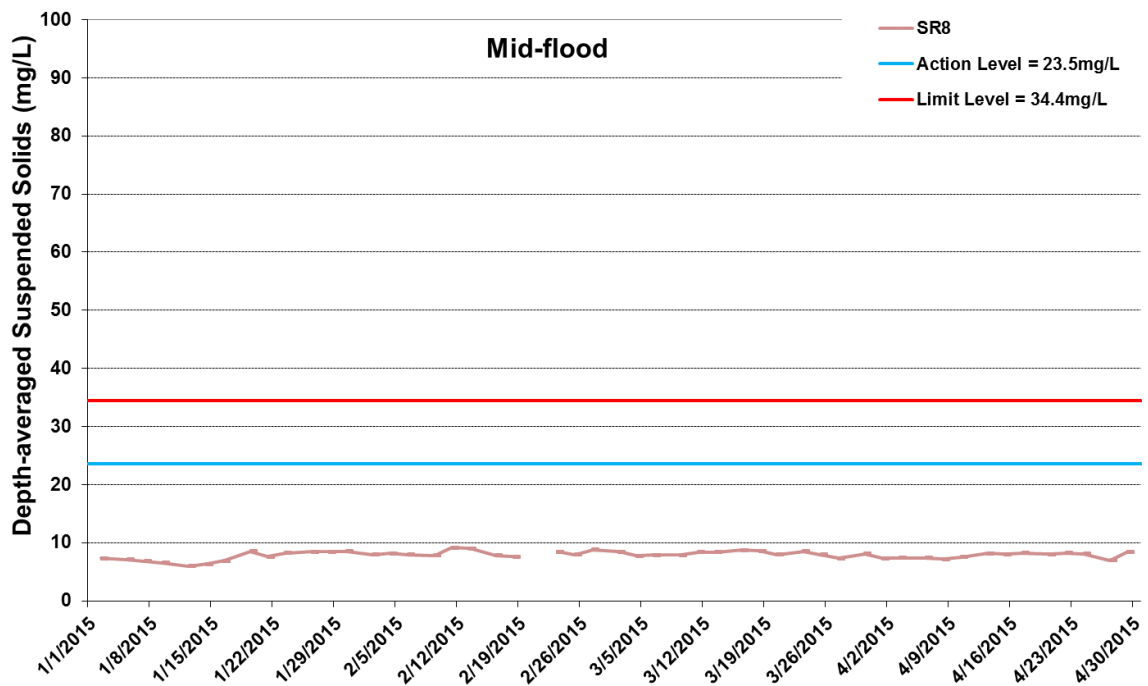
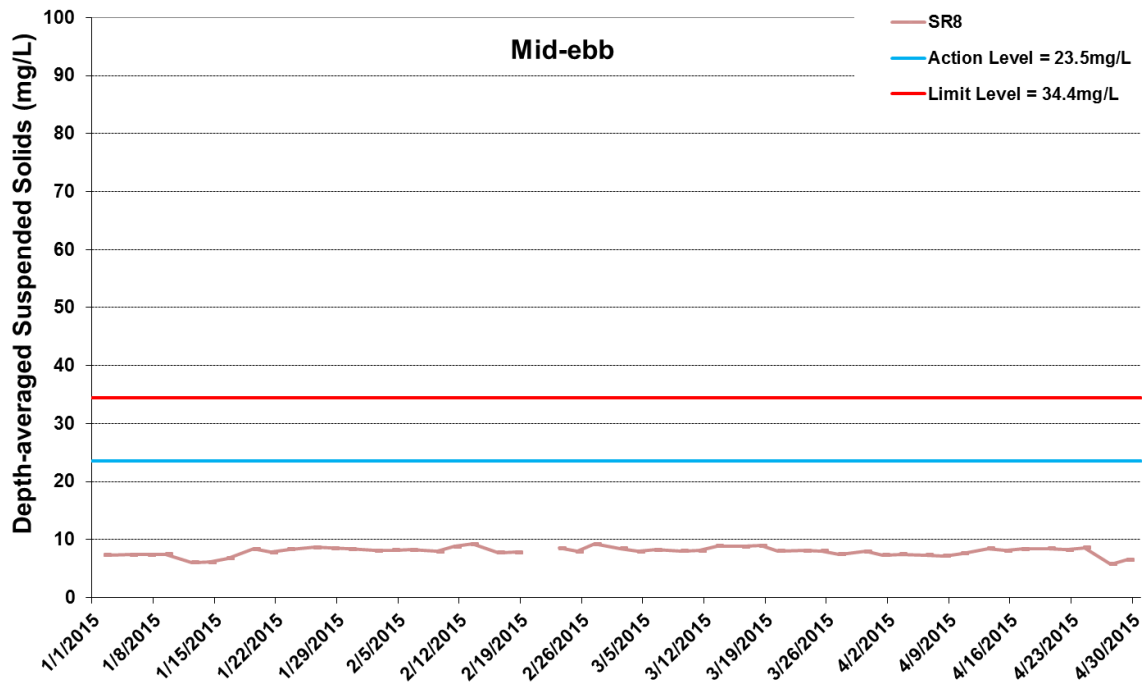


Figure I42 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



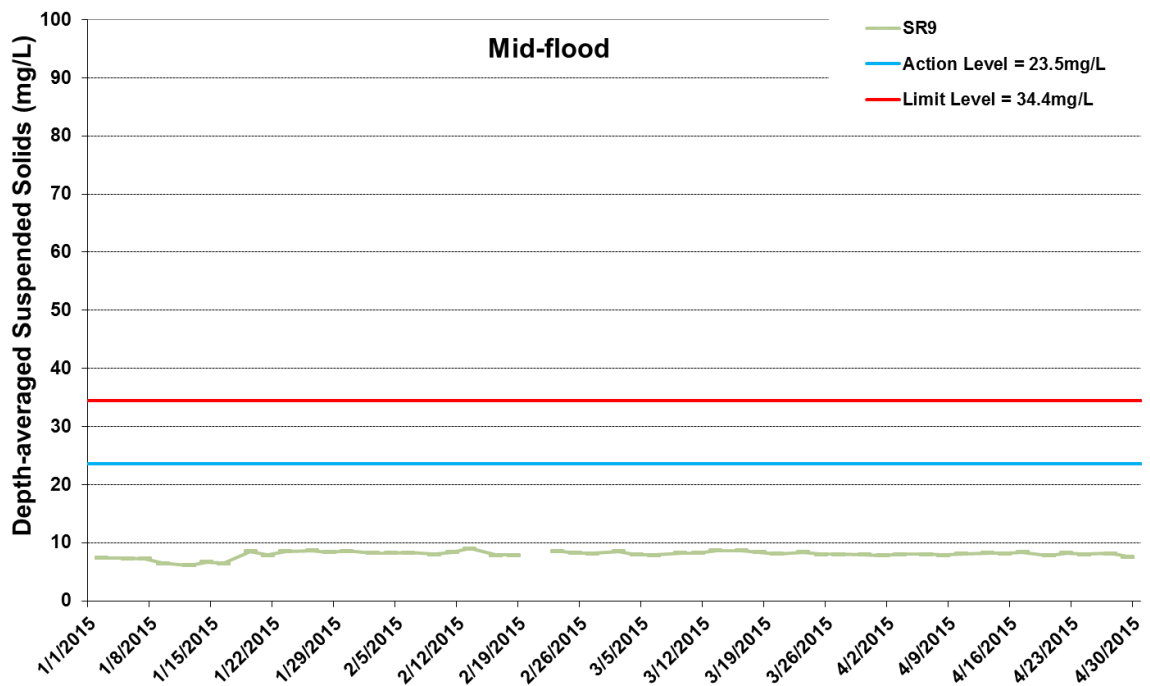
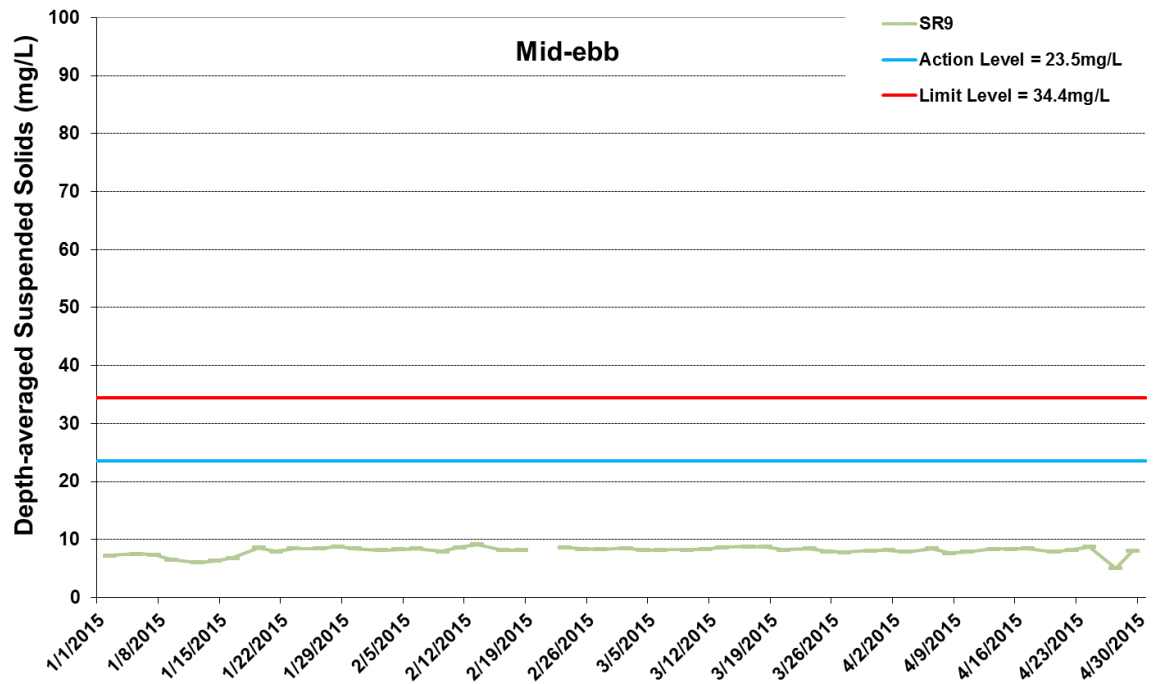


Figure I43 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 January 2015 and 30 April 2015 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Only minor marine works included rock bund deposition for marine sheet pile remedial works was carried out from 1 January 2015 to 28 February 2015. WQM on 20 February 2015 was postponed to 23 February 2015.



Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	18:27	20.2	8.02	27.1	7.24	6.22	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	18:27	20	8	27	7.26	6.2	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.4	2	1	18:27	20.1	8.09	27.3	7.19	6.3	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.4	2	2	18:27	20.1	8.07	27.2	7.16	6.33	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.8	3	1	18:27	20	8.16	27.2	7.11	6.47	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.8	3	2	18:27	20.1	8.17	27.2	7.09	6.44	7.8
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	15:41	20.2	8.12	27	7.3	6.36	7.1
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	15:41	20.1	8.12	27.1	7.34	6.33	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.9	2	1	15:41	20.2	8.17	27.3	7.21	6.4	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.9	2	2	15:41	20.2	8.18	27.3	7.25	6.42	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.7	3	1	15:41	20.1	8.2	27.5	7.13	6.55	7.8
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.7	3	2	15:41	20.2	8.2	27.4	7.11	6.57	7.9
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	17:46	20	8.12	27	7.44	5.99	6.9
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	17:46	20	8.13	27	7.39	6.02	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.3	2	1	17:46	20.1	8.15	27.1	7.32	6.06	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.3	2	2	17:46	20	8.14	27.2	7.35	6.02	7.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.5	3	1	17:46	20.2	8.18	27.4	7.25	6.2	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.5	3	2	17:46	20.2	8.17	27.3	7.29	6.23	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	17:25	20.1	8.12	27.2	7.47	6.4	7.8
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	17:25	20	8.13	27.1	7.49	6.44	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS13	Middle	8	2	1	17:25	20	8.17	27.3	7.32	6.3	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS13	Middle	8	2	2	17:25	20	8.17	27.2	7.36	6.32	7.1
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.9	3	1	17:25	20.1	8.15	27.4	7.29	6.49	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.9	3	2	17:25	20.2	8.14	27.4	7.27	6.52	7.9
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	18:06	20.1	7.98	27.2	7.33	6.07	6.9
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	18:06	20	7.97	27.2	7.31	6.03	7.1
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.8	2	1	18:06	20.1	8.05	27.3	7.28	6.13	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.8	2	2	18:06	20.1	8.06	27.2	7.3	6.1	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.6	3	1	18:06	20.2	8.11	27.4	7.18	6.18	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.6	3	2	18:06	20.2	8.1	27.4	7.23	6.2	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	17:06	20	7.98	27.2	7.3	6.14	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	17:06	19.9	7.97	27.2	7.27	6.1	7.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.8	2	1	17:06	20	8.01	27.4	7.16	6.19	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.8	2	2	17:06	20	8.02	27.3	7.19	6.23	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.6	3	1	17:06	20.2	8.18	27.3	7.09	6.36	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.6	3	2	17:06	20.1	8.17	27.3	7.13	6.34	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	16:34	20.1	8.17	27.2	7.29	6.25	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	16:34	20	8.19	27.1	7.27	6.21	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	16:34						
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	16:34						
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.6	3	1	16:34	20.2	8.24	27.2	7.25	6.36	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.6	3	2	16:34	20.1	8.25	27.3	7.28	6.32	7.7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	16:50	20.1	8.17	27.3	7.33	7.01	8
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	16:50	20.1	8.15	27.3	7.35	7.04	8
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	16:50						
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	16:50						
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.3	3	1	16:50	20.1	8.2	27.2	7.3	6.7	7.7
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.3	3	2	16:50	20.1	8.19	27.3	7.27	6.67	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	16:07	20	8	27.1	7.4	6.1	7.1
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	16:07	20	8.02	27.1	7.43	6.12	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	5.9	2	1	16:07	20	8.09	27.2	7.29	6.28	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	5.9	2	2	16:07	19.9	8.09	27.1	7.26	6.27	7.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	10.8	3	1	16:07	20	8.21	27.2	7.22	6.5	7.8
TMCLKL	HY/2012/08	2015-04-01	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	10.8	3	2	16:07	20	8.19	27.2	7.19	6.44	7.7
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	10:15	20	7.99	27	7.13	6.32	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	10:15	20.1	8.01	27.1	7.14	6.36	7.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.3	2	1	10:15	20.1	8.07	27.2	7.08	6.41	7.8
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.3	2	2	10:15	20.2	8.08	27.1	7.05	6.45	7.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.6	3	1	10:15	20.3	8.18	27.3	7.01	6.58	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.6	3	2	10:15	20.2	8.16	27.4	6.97	6.54	7.9
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	13:26	20	8.11	27.1	7.19	6.48	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	13:26	20	8.12	27.2	7.21	6.46	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.7	2	1	13:26	20.1	8.16	27.2	7.09	6.52	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.7	2	2	13:26	20.2	8.17	27.3	7.12	6.54	7.7
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.4	3	1	13:26	20.1	8.19	27.3	7.03	6.68	7.9
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.4	3	2	13:26	20.2	8.21	27.4	7.01	6.69	7.8
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	10:57	19.8	8.11	27.1	7.31	6.1	7.1
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	10:57	19.9	8.12	27	7.28	6.08	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.2	2	1	10:57	20	8.14	27.2	7.22	6.17	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.2	2	2	10:57	20.1	8.16	27.2	7.2	6.18	7.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.3	3	1	10:57	20.2	8.17	27.3	7.14	6.31	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.3	3	2	10:57	20.3	8.18	27.2	7.17	6.33	7.7
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	11:17	19.9	8.11	27	7.36	6.52	7.8
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	11:17	20	8.12	27.1	7.38	6.54	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.9	2	1	11:17	20	8.16	27.2	7.22	6.42	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.9	2	2	11:17	20.1	8.17	27.3	7.24	6.44	7.1
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.7	3	1	11:17	20.2	8.13	27.4	7.16	6.61	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.7	3	2	11:17	20.1	8.15	27.3	7.18	6.64	7.9
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	10:36	19.9	7.96	27.1	7.23	6.18	7
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	10:36	20	7.97	27.2	7.21	6.15	7.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.7	2	1	10:36	20.1	8.04	27.2	7.18	6.28	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.7	2	2	10:36	20	8.06	27.3	7.16	6.25	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.4	3	1	10:36	20.1	8.09	27.4	7.04	6.31	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.4	3	2	10:36	20.2	8.1	27.5	7.08	6.34	7.7
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	11:36	19.8	7.99	27.1	7.16	6.24	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	11:36	19.9	7.96	27.2	7.17	6.25	7.7
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.7	2	1	11:36	19.9	8.02	27.2	7.03	6.31	7.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.7	2	2	11:36	20	8.03	27.3	7.05	6.33	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.4	3	1	11:36	20.1	8.16	27.2	6.97	6.47	7.7
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.4	3	2	11:36	20.2	8.17	27.3	6.99	6.45	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	12:27	19.9	8.16	27.1	7.18	6.38	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	12:27	20	8.18	27.1	7.16	6.36	7.1
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	12:27						
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	12:27						
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.4	3	1	12:27	20.1	8.23	27.2	7.14	6.42	7.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.4	3	2	12:27	20.2	8.24	27.1	7.15	6.4	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	11:59	19.9	8.15	27.2	7.22	7.11	8.3
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	11:59	20	8.16	27.3	7.24	7.13	8.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	11:59						
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	11:59						
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.1	3	1	11:59	20	8.19	27.3	7.18	6.82	7.9
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.1	3	2	11:59	20.1	8.2	27.3	7.16	6.81	8.1
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	12:55	19.8	7.99	27	7.28	6.21	7.2
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	12:55	19.9	8.01	27.1	7.3	6.23	7.4
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.8	2	1	12:55	19.9	8.1	27.1	7.18	6.4	7.6
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.8	2	2	12:55	19.9	8.11	27.2	7.16	6.38	7.5
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	10.6	3	1	12:55	20	8.18	27.2	7.1	6.6	7.8
TMCLKL	HY/2012/08	2015-04-01	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	10.6	3	2	12:55	20.1	8.2	27.3	7.08	6.54	7.9
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	19:18	19	8.13	27	7.07	6.58	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	19:18	18.9	8.15	27.1	7.09	6.6	7.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS4	Middle	10.4	2	1	19:18	19.1	8.2	27.2	6.94	6.73	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS4	Middle	10.4	2	2	19:18	19.2	8.22	27.2	6.96	6.71	7.5
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.8	3	1	19:18	19.3	7.94	27.3	6.83	6.83	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.8	3	2	19:18	19.3	7.92	27.4	6.85	6.8	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	16:57	19	8.12	27	7.18	6.43	7.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	16:57	19.1	8.14	27.1	7.16	6.41	7.1

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS6	Middle	5.5	2	1	16:57	19.2	8.2	27.1	7.04	6.5	7.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS6	Middle	5.5	2	2	16:57	19.3	8.22	27.2	7.02	6.52	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.5	3	1	16:57	19.4	8.11	27.3	6.95	6.59	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.5	3	2	16:57	19.4	8.09	27.4	6.97	6.61	7.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	18:45	19	8.17	27	7.19	6.43	7.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	18:45	19.1	8.19	27	7.21	6.45	7.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	1	18:45	19.2	8.2	27.1	7.06	6.73	7.9
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	2	18:45	19.3	8.22	27.2	7.08	6.71	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.6	3	1	18:45	19.4	7.96	27.3	6.95	6.8	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.6	3	2	18:45	19.3	7.98	27.4	6.97	6.82	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	18:30	19	7.96	27	7.27	6.74	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	18:30	19.1	7.98	27.1	7.25	6.76	7.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS13	Middle	5.6	2	1	18:30	19.2	8.03	27.1	7.19	6.88	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS13	Middle	5.6	2	2	18:30	19.3	8.05	27.2	7.17	6.9	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.2	3	1	18:30	19.4	8.12	27.3	7.04	6.94	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.2	3	2	18:30	19.4	8.14	27.4	7.06	6.96	8.1
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	19:05	19.1	7.96	27.1	7.12	6.72	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	19:05	19.2	7.98	27.2	7.14	6.7	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS14	Middle	7.8	2	1	19:05	19.3	8.03	27.3	7.06	6.8	7.9
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS14	Middle	7.8	2	2	19:05	19.3	8.05	27.3	7.04	6.82	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS14	Bottom	14.6	3	1	19:05	19.4	8.12	27.4	6.9	6.97	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS14	Bottom	14.6	3	2	19:05	19.3	8.1	27.3	6.89	6.99	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	18:15	19	8.04	27.1	7.21	6.92	7.9
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	18:15	19.1	8.06	27.2	7.19	6.94	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS15	Middle	5.6	2	1	18:15	19.2	8.21	27.3	7.13	7.03	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS15	Middle	5.6	2	2	18:15	19.3	8.19	27.3	7.15	7.05	8.1
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.1	3	1	18:15	19.3	8.13	27.4	7.03	7.12	8.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.1	3	2	18:15	19.4	8.15	27.5	7.05	7.14	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	17:39	18.9	8.12	27	7.21	6.32	7.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	17:39	19	8.14	27.1	7.19	6.3	7.1
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	17:39						
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	17:39						
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.6	3	1	17:39	19.1	8	27.2	7.13	6.43	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.6	3	2	17:39	19.2	8.02	27.3	7.11	6.45	7.5
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	18:00	19.1	7.86	27	7.14	6.83	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	18:00	19.2	7.88	27	7.16	6.85	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	18:00						
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	18:00						
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.4	3	1	18:00	19.3	8.04	27.1	7.04	6.92	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.4	3	2	18:00	19.4	8.06	27.2	7.06	6.94	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	17:18	19.1	8	27.1	7.14	6.09	6.9
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	17:18	19.2	8.02	27.2	7.12	6.11	7
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.9	2	1	17:18	19.3	8.13	27.2	6.93	6.23	7.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.9	2	2	17:18	19.3	8.15	27.3	6.95	6.21	7.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.8	3	1	17:18	19.4	7.96	27.4	6.85	6.34	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.8	3	2	17:18	19.5	7.98	27.4	6.83	6.36	7.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	10:50	18.9	8.1	27.1	6.98	6.63	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	10:50	19	8.09	27.2	6.99	6.64	7.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.5	2	1	10:50	19	8.14	27.3	6.82	6.82	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.5	2	2	10:50	19.1	8.16	27.2	6.8	6.8	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS4	Bottom	11.7	3	1	10:50	19.2	7.93	27.3	6.72	6.9	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS4	Bottom	11.7	3	2	10:50	19.1	7.92	27.3	6.7	6.88	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	14:03	18.9	8.1	27.1	7.09	6.52	7.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	14:03	19	8.09	27	7.07	6.54	7
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.6	2	1	14:03	19.1	8.18	27.2	6.98	6.56	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.6	2	2	14:03	19	8.19	27.1	6.96	6.58	7.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.2	3	1	14:03	19.2	8.2	27.2	6.9	6.63	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.2	3	2	14:03	19.1	8.21	27.2	6.89	6.66	8



Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	11:37	18.9	8.16	27.1	7.16	6.52	7.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	11:37	19	8.17	27.2	7.17	6.55	7.1
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	1	11:37	19.1	8.18	27.2	6.99	6.82	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	2	11:37	19.2	8.19	27.3	6.97	6.83	7.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.2	3	1	11:37	19.3	7.94	27.2	6.9	6.93	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.2	3	2	11:37	19.3	7.95	27.3	6.89	6.96	8.1
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	12:01	18.8	7.94	27.1	7.12	6.82	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	12:01	18.9	7.92	27.1	7.14	6.84	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.3	2	1	12:01	19	7.96	27.2	7.14	6.93	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.3	2	2	12:01	19	7.99	27.3	7.16	6.95	8.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS13	Bottom	9.6	3	1	12:01	19.1	8.03	27.2	6.98	7.01	8.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS13	Bottom	9.6	3	2	12:01	19.2	8.05	27.3	6.97	7.03	8.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	11:13	19	7.91	27	7.03	6.81	8.1
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	11:13	19.1	7.92	27.1	7.05	6.83	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.7	2	1	11:13	19.1	7.98	27.2	7.08	6.89	8.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.7	2	2	11:13	19.2	7.96	27.2	7.09	6.9	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS14	Bottom	14.3	3	1	11:13	19.2	8.09	27.3	6.81	6.99	8.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS14	Bottom	14.3	3	2	11:13	19.3	8.06	27.2	6.8	7.05	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	12:23	18.9	8.01	27	7.11	7.06	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	12:23	19	8.02	27	7.13	7.08	8.1
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.4	2	1	12:23	19.1	8.11	27.1	7.14	7.12	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.4	2	2	12:23	19	8.13	27.2	7.15	7.14	8.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS15	Bottom	9.8	3	1	12:23	19.2	8.16	27.2	7.08	7.18	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	IS15	Bottom	9.8	3	2	12:23	19.1	8.17	27.3	7.24	7.2	8.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	13:13	18.9	8.1	27.1	7.13	6.38	7.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	13:13	18.9	8.11	27.1	7.15	6.4	7.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	13:13						
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	13:13						
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.4	3	1	13:13	19	8.04	27.1	7.09	6.52	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.4	3	2	13:13	19.1	8.05	27.2	7.08	6.53	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	12:46	18.9	7.84	27	7.04	6.96	7.8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	12:46	19	7.88	26.9	7.02	6.94	7.6
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	12:46						
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	12:46						
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.2	3	1	12:46	19.1	7.86	27.1	6.92	7.03	8.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.2	3	2	12:46	19	7.87	27	6.9	7.05	8
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	13:39	19	7.99	27	7.06	6.18	7
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	13:39	19	7.96	27.1	7.05	6.19	7.2
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.7	2	1	13:39	19.1	8.06	27.1	6.9	6.26	7.4
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.7	2	2	13:39	19.2	8.07	27.2	6.89	6.28	7.3
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.4	3	1	13:39	19.2	7.94	27.2	6.62	6.4	7.7
TMCLKL	HY/2012/08	2015-04-03	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.4	3	2	13:39	19.3	7.95	27.3	6.64	6.42	7.9
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	21:10	21	7.96	27	7.24	6.34	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	21:10	21.1	7.98	27.1	7.2	6.32	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS4	Middle	10.4	2	1	21:10	21.2	8.03	27.2	7.13	6.47	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS4	Middle	10.4	2	2	21:10	21.3	8.05	27.2	7.15	6.49	7.9
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.8	3	1	21:10	21.4	8.13	27.3	7.03	6.55	7.8
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.8	3	2	21:10	21.5	8.11	27.4	7.05	6.52	8
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	18:43	21	7.96	27	7.3	6.37	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	18:43	21.1	7.98	27	7.28	6.39	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	1	18:43	21.1	8.03	27.1	7.25	6.41	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	2	18:43	21.2	8.05	27.2	7.23	6.43	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.6	3	1	18:43	21.3	8.11	27.3	7.09	6.55	7.9
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.6	3	2	18:43	21.3	8.13	27.4	7.11	6.57	8.1
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	20:35	21	7.96	27	7.43	6.04	6.8
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	20:35	21.1	7.98	27.1	7.41	6.06	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	1	20:35	21.2	8.03	27.2	7.26	6.13	7.3
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	2	20:35	21.3	8.01	27.3	7.28	6.15	7.6

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.5	3	1	20:35	21.4	8.11	27.4	7.19	6.23	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.5	3	2	20:35	21.4	8.09	27.5	7.21	6.25	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	20:20	21.1	8.09	27	7.37	6.33	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	20:20	21.1	8.11	27.1	7.39	6.35	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS13	Middle	6	2	1	20:20	21.2	8.13	27.2	7.31	6.43	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS13	Middle	6	2	2	20:20	21.3	8.11	27.3	7.29	6.45	7.9
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.9	3	1	20:20	21.4	8.04	27.4	7.24	6.5	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.9	3	2	20:20	21.4	8.06	27.3	7.26	6.52	7.8
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	20:55	21.1	8.06	27.1	7.36	6.13	7
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	20:55	21.2	8.08	27.2	7.34	6.13	6.8
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS14	Middle	7.8	2	1	20:55	21.3	8.13	27.3	7.23	6.21	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS14	Middle	7.8	2	2	20:55	21.3	8.15	27.3	7.21	6.23	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS14	Bottom	14.6	3	1	20:55	21.4	8.2	27.4	7.06	6.36	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS14	Bottom	14.6	3	2	20:55	21.3	8.22	27.5	7.04	6.34	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	20:05	21	8.03	27.1	7.2	6.17	7
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	20:05	21.1	8.05	27.2	7.15	6.19	7.3
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS15	Middle	5.8	2	1	20:05	21.2	8.12	27.3	7.13	6.24	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS15	Middle	5.8	2	2	20:05	21.3	8.1	27.3	7.15	6.26	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.6	3	1	20:05	21.4	7.96	27.4	7	6.33	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.6	3	2	20:05	21.5	7.98	27.3	7.02	6.35	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	19:29	20.9	8.06	27	7.23	6.23	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	19:29	21	8.04	27	7.25	6.25	7.1
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	19:29						
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	19:29						
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.6	3	1	19:29	21.1	8.13	27.1	7.16	6.3	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.6	3	2	19:29	21.2	8.15	27.2	7.18	6.32	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	19:44	21.1	7.96	27	7.24	6.93	7.8
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	19:44	21.2	7.98	27.1	7.26	6.95	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	19:44						
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	19:44						
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.4	3	1	19:44	21.3	8.03	27.2	7.17	7.03	8.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.4	3	2	19:44	21.4	8.05	27.3	7.15	7.05	8.3
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	19:09	21.1	8.03	27	7.34	6.17	7
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	19:09	21.2	8.05	27.1	7.36	6.19	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR10A	Middle	6	2	1	19:09	21.3	8.11	27.2	7.27	6.22	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR10A	Middle	6	2	2	19:09	21.3	8.13	27.3	7.29	6.24	7.1
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.9	3	1	19:09	21.4	8.14	27.4	7.14	6.36	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.9	3	2	19:09	21.5	8.12	27.3	7.16	6.38	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	12:16	21.2	7.91	27.1	7.16	6.41	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	12:16	21.1	7.93	27	7.18	6.4	7.9
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.2	2	1	12:16	21.4	8.01	27.3	7.06	6.56	8.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.2	2	2	12:16	21.3	7.99	27.3	7.08	6.57	8.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS4	Bottom	19.4	3	1	12:16	21.5	8.03	27.5	6.93	6.59	8.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS4	Bottom	19.4	3	2	12:16	21.4	8.06	27.4	6.96	6.57	8.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	15:23	21.1	7.99	27.1	7.22	6.46	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	15:23	21.2	7.98	27	7.24	6.48	7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.6	2	1	15:23	21.3	8.07	27.3	7.2	6.58	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.6	2	2	15:23	21.2	8.06	27.2	7.21	6.56	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.2	3	1	15:23	21.4	8.03	27.5	7.06	6.6	8.3
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.2	3	2	15:23	21.4	8.05	27.4	7.02	6.63	8.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	13:03	21	7.93	27.1	7.36	6.13	7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	13:03	21.1	7.94	27.2	7.38	6.15	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	1	13:03	21.3	8.05	27.4	6.18	6.19	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	2	13:03	21.4	8.06	27.3	6.17	6.2	7.3
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.1	3	1	13:03	21.4	8.1	27.6	7.13	6.31	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.1	3	2	13:03	21.5	8.11	27.5	7.11	6.3	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	13:25	21	8.14	27.1	7.22	6.38	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	13:25	21.1	8.16	27.2	7.24	6.41	7.4

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.7	2	1	13:25	21.3	8.1	27.3	7.19	6.48	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.7	2	2	13:25	21.2	8.12	27.4	7.17	6.49	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.4	3	1	13:25	21.4	8.02	27.6	7.11	6.54	7.8
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.4	3	2	13:25	21.5	8.04	27.5	7.13	6.58	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	12:39	21.2	8.03	27.2	7.29	6.17	7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	12:39	21.1	8.04	27.1	7.27	6.19	7.3
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.6	2	1	12:39	21.3	8.09	27.3	7.24	6.26	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.6	2	2	12:39	21.4	8.1	27.4	7.21	6.28	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS14	Bottom	14.1	3	1	12:39	21.5	8.16	27.5	6.92	6.41	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS14	Bottom	14.1	3	2	12:39	21.6	8.17	27.6	6.94	6.43	7.9
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	13:45	21.3	8.09	27	7.14	6.25	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	13:45	21.2	8.07	27.1	7.11	6.29	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.7	2	1	13:45	21.3	8.14	27.2	7.08	6.31	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.7	2	2	13:45	21.3	8.15	27.3	7.04	6.35	7.1
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.4	3	1	13:45	21.5	8.11	27.5	6.91	6.42	7.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.4	3	2	13:45	21.6	8.12	27.5	6.94	6.44	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	14:31	21.1	8.09	27.1	7.18	6.32	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	14:31	21	8.07	27.2	7.15	6.34	7.3
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	14:31						
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	14:31						
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.2	3	1	14:31	21.3	8.16	27.3	7.09	6.37	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.2	3	2	14:31	21.2	8.17	27.2	7.06	6.39	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	14:08	21.3	7.99	27.2	7.13	7.08	8.3
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	14:08	21.2	8	27.1	7.15	7.06	8.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	14:08						
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	14:08						
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	1	14:08	21.4	8.06	27.3	7.03	7.14	8.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	2	14:08	21.3	8.08	27.4	7.06	7.17	8.6
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	14:56	21	8.06	27.1	7.28	6.21	7.4
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	14:56	21.1	8.07	27.1	7.25	6.23	7.1
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.8	2	1	14:56	21.2	8.09	27.3	7.21	6.28	7.5
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.8	2	2	14:56	21.3	8.1	27.4	7.2	6.3	7.2
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.6	3	1	14:56	21.5	8.16	27.6	7.1	6.4	7.7
TMCLKL	HY/2012/08	2015-04-06	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.6	3	2	14:56	21.6	8.17	27.5	7.12	6.42	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	10:18	21	7.97	27	7.19	6.33	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	10:18	21	7.99	27	7.17	6.35	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.3	2	1	10:18	21.1	8.03	27.1	7.11	6.4	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.3	2	2	10:18	21.2	8.05	27.2	7.09	6.42	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.6	3	1	10:18	21.3	8.13	27.3	7	6.5	7.9
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.6	3	2	10:18	21.4	8.15	27.4	7.02	6.52	7.5
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	08:00	21.1	8.03	27	7.35	6.33	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	08:00	21.2	8.05	27	7.33	6.35	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.8	2	1	08:00	21.3	8.13	27.1	7.24	6.39	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.8	2	2	08:00	21.3	8.15	27.2	7.22	6.41	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.5	3	1	08:00	21.4	8.2	27.3	7.14	6.43	7.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.5	3	2	08:00	21.5	8.22	27.4	7.12	6.45	7.9
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	09:50	21	8.14	27	7.36	6.11	6.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	09:50	21.1	8.12	27.1	7.38	6.13	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.2	2	1	09:50	21.2	7.95	27.2	7.31	6.22	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.2	2	2	09:50	21.3	7.97	27.3	7.24	6.24	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.4	3	1	09:50	21.4	7.88	27.4	7.13	6.3	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.4	3	2	09:50	21.5	7.9	27.4	7.15	6.32	7.7
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	09:35	21.1	7.96	27.1	7.4	6.14	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	09:35	21.2	7.94	27.2	7.42	6.16	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.1	2	1	09:35	21.3	8.07	27.3	7.35	6.37	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.1	2	2	09:35	21.3	8.09	27.3	7.37	6.35	7.7
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.1	3	1	09:35	21.4	8.13	27.4	7.3	6.45	7.9
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.1	3	2	09:35	21.4	8.15	27.3	7.32	6.47	7.7

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	10:05	21.1	8	27.1	7.29	6.23	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	10:05	21.2	8.02	27.2	7.27	6.25	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.8	2	1	10:05	21.3	8.13	27.3	7.21	6.33	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.8	2	2	10:05	21.3	8.11	27.3	7.19	6.31	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.5	3	1	10:05	21.4	8.2	27.4	7.15	6.4	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.5	3	2	10:05	21.4	8.22	27.3	7.13	6.42	7.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	09:20	21	8.06	27	7.26	6.24	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	09:20	21.1	8.08	27	7.24	6.26	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.9	2	1	09:20	21.2	8.13	27.1	7.17	6.33	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.9	2	2	09:20	21.3	8.15	27.2	7.19	6.35	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.8	3	1	09:20	21.4	8.22	27.3	7.03	6.43	7.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.8	3	2	09:20	21.5	8.2	27.4	7.05	6.41	7.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	08:45	21	8.14	27	7.2	6.17	6.9
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	08:45	21.1	8.12	27	7.22	6.15	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	08:45						
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	08:45						
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.5	3	1	08:45	21.2	7.96	27.1	7.03	6.2	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.5	3	2	08:45	21.3	7.98	27.2	7.05	6.22	7.5
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	09:00	21.1	7.94	27.1	7.33	6.84	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	09:00	21.2	7.96	27.2	7.31	6.86	7.5
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	09:00						
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	09:00						
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	1	09:00	21.3	8.13	27.3	7.2	6.94	8.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	2	09:00	21.4	8.15	27.4	7.22	6.96	8.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	08:23	21	7.96	27.1	7.29	6.21	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	08:23	21	7.98	27.2	7.31	6.23	7.5
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.1	2	1	08:23	21.1	8.03	27.3	7.23	6.3	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.1	2	2	08:23	21.2	8.05	27.3	7.25	6.32	7.5
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	11.1	3	1	08:23	21.3	8.13	27.4	7.11	6.45	7.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	11.1	3	2	08:23	21.4	8.15	27.4	7.09	6.43	7.9
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	13:26	21.2	8.01	27.2	7.16	6.21	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	13:26	21.3	8.02	27.2	7.2	6.24	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.1	2	1	13:26	21.3	8.02	27.3	7.2	6.22	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.1	2	2	13:26	21.4	8.04	27.3	7.18	6.2	7.7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.2	3	1	13:26	21.4	8.04	27.4	7.24	6.18	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.2	3	2	13:26	21.5	8.04	27.4	7.25	6.16	6.9
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	16:06	21.2	8.04	27.1	7.28	6.24	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	16:06	21.3	8.05	27.1	7.26	6.26	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.7	2	1	16:06	21.3	8.08	27.2	7.25	6.34	7.7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.7	2	2	16:06	21.3	8.1	27.3	7.24	6.3	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.3	3	1	16:06	21.4	8.12	27.4	7.2	6.36	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.3	3	2	16:06	21.4	8.1	27.4	7.18	6.4	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	14:03	21.2	8.06	27.1	7.34	6.15	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	14:03	21.3	8.08	27.1	7.32	6.2	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	1	14:03	21.3	8.02	27.2	7.28	6.23	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	2	14:03	21.4	8	27.3	7.26	6.26	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	1	14:03	21.5	8	27.4	7.2	6.29	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	2	14:03	21.5	7.98	27.5	7.18	6.34	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	14:21	21.2	8.02	27.1	7.34	6.22	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	14:21	21.3	8	27.2	7.38	6.24	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.9	2	1	14:21	21.3	8.03	27.3	7.31	6.3	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.9	2	2	14:21	21.4	8.04	27.4	7.33	6.29	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.8	3	1	14:21	21.4	8.05	27.4	7.26	6.38	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.8	3	2	14:21	21.5	8.06	27.5	7.24	6.42	7.5
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	13:45	21.2	8.03	27.2	7.28	6.17	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	13:45	21.3	8.01	27.2	7.24	6.19	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.6	2	1	13:45	21.4	8	27.2	7.22	6.25	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.6	2	2	13:45	21.4	7.98	27.3	7.18	6.3	7.4

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.2	3	1	13:45	21.5	8.04	27.3	7.16	6.37	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.2	3	2	13:45	21.5	8.05	27.4	7.2	6.33	7.7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	14:39	21.3	8.07	27.2	7.18	6.3	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	14:39	21.3	8.09	27.3	7.2	6.26	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.8	2	1	14:39	21.3	8.14	27.3	7.16	6.34	7.6
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.8	2	2	14:39	21.4	8.15	27.4	7.14	6.3	7.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.6	3	1	14:39	21.5	8.23	27.4	7	6.37	8
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.6	3	2	14:39	21.6	8.25	27.5	7.03	6.4	8.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	15:13	21.1	8.06	27.1	7.16	6.14	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	15:13	21.2	8.08	27.2	7.2	6.2	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	15:13						
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	15:13						
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.4	3	1	15:13	21.4	8.02	27.3	7.14	6.24	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.4	3	2	15:13	21.4	8.04	27.4	7.1	6.3	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	14:58	21.3	7.98	27.2	7.27	6.74	7.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	14:58	21.4	7.99	27.3	7.29	6.8	7.7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	14:58						
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	14:58						
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.4	3	1	14:58	21.5	8.11	27.4	7.14	6.85	7.8
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.4	3	2	14:58	21.6	8.13	27.5	7.16	6.9	7.5
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	15:34	21.1	8.02	27.1	7.24	6.18	7
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	15:34	21.2	8.04	27.2	7.26	6.2	7.2
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6	2	1	15:34	21.2	8.04	27.3	7.27	6.23	7.4
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6	2	2	15:34	21.3	8.05	27.4	7.3	6.25	7.1
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	11	3	1	15:34	21.3	8.06	27.5	7.28	6.28	7.3
TMCLKL	HY/2012/08	2015-04-08	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	11	3	2	15:34	21.4	8.08	27.5	7.34	6.3	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	11:13	22.2	7.94	27.3	7.35	6.26	7
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	11:13	22.2	7.95	27.4	7.38	6.24	7.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10	2	1	11:13	22.2	7.97	27.6	7.27	6.51	7.6
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10	2	2	11:13	22.3	7.97	27.6	7.25	6.54	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	18.9	3	1	11:13	22.3	7.99	27.5	7.17	7.01	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	18.9	3	2	11:13	22.4	8	27.6	7.15	7.03	8.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	08:29	22.1	7.99	27.3	7.38	6.32	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	08:29	22.2	7.97	27.4	7.35	6.37	7.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.9	2	1	08:29	22.3	7.95	27.5	7.2	6.72	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.9	2	2	08:29	22.2	7.98	27.6	7.22	6.75	7.9
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.8	3	1	08:29	22.4	8.01	27.6	7.02	7.02	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.8	3	2	08:29	22.3	8.02	27.7	7.05	7.05	8.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	10:33	22.2	7.94	27.3	7.3	6.22	7
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	10:33	22.1	7.94	27.3	7.33	6.25	7.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7	2	1	10:33	22.3	7.98	27.4	7.22	6.81	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7	2	2	10:33	22.2	7.99	27.5	7.19	6.84	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	12.9	3	1	10:33	22.4	8.14	27.5	7.1	7.02	8.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	12.9	3	2	10:33	22.4	8.13	27.5	7.08	7.04	8.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	10:13	22.1	8.04	27.3	7.35	6.27	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	10:13	22.2	8.05	27.3	7.31	6.24	7.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6	2	1	10:13	22.2	7.99	27.4	7.28	6.8	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6	2	2	10:13	22.3	7.98	27.5	7.25	6.83	8.1
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11	3	1	10:13	22.4	8.02	27.6	7.11	6.97	8.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11	3	2	10:13	22.4	8.03	27.6	7.13	6.95	8.6
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	10:53	22.2	8	27.4	7.2	6.38	7.6
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	10:53	22.1	8.01	27.4	7.24	6.41	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.6	2	1	10:53	22.3	7.97	27.5	7.14	6.72	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.6	2	2	10:53	22.3	7.98	27.5	7.17	6.76	8.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.2	3	1	10:53	22.3	8.1	27.6	7.04	6.95	8.5
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.2	3	2	10:53	22.4	8.1	27.5	7.02	6.93	8.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	09:53	22.2	7.84	27.3	7.28	6.3	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	09:53	22.2	7.88	27.4	7.27	6.33	7.1

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.7	2	1	09:53	22.3	7.92	27.5	7.15	6.72	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.7	2	2	09:53	22.3	7.92	27.5	7.13	6.74	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.4	3	1	09:53	22.4	8	27.6	7.04	6.88	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.4	3	2	09:53	22.3	8.01	27.6	7.03	6.85	8.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	09:13	22.2	7.97	27.3	7.3	6.21	7.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	09:13	22.1	7.98	27.3	7.28	6.24	7.5
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	09:13						
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	09:13						
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.4	3	1	09:13	22.3	8.01	27.4	7.17	6.58	7.6
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.4	3	2	09:13	22.2	8.04	27.4	7.15	6.63	7.9
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	09:33	22.2	8.01	27.3	7.24	6.84	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	09:33	22.1	8.02	27.3	7.26	6.88	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	09:33						
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	09:33						
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.7	3	1	09:33	22.3	7.89	27.5	7.09	7.02	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.7	3	2	09:33	22.3	7.9	27.5	7.11	7.04	8.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	08:51	22.2	8.02	27.4	7.22	6.74	7.9
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	08:51	22.2	8.03	27.4	7.24	6.7	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	5.9	2	1	08:51	22.3	8.1	27.5	7.18	7.04	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	5.9	2	2	08:51	22.2	8.11	27.6	7.15	7.01	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	10.7	3	1	08:51	22.3	8.11	27.5	7.09	7.12	8.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	10.7	3	2	08:51	22.3	8.12	27.5	7.07	7.15	8.7
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	14:55	21.7	7.96	27.6	7.22	6.29	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	14:55	21.8	7.97	27.8	7.21	6.32	7.6
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	9.4	2	1	14:55	22	7.99	27.9	7.2	6.59	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	9.4	2	2	14:55	22.1	8	28.1	7.16	6.56	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	17.8	3	1	14:55	21.9	7.92	27.7	7.06	7.07	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	17.8	3	2	14:55	22.1	7.93	27.8	7.09	7.06	8.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	17:09	20	7.94	27.6	7.26	6.44	7.5
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	17:09	21	7.96	27.7	7.27	6.43	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.6	2	1	17:09	20.6	7.94	27.9	7.14	6.66	7.6
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.6	2	2	17:09	20.9	7.92	27.7	7.17	6.69	7.9
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.2	3	1	17:09	20.7	7.97	27.4	7	6.97	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.2	3	2	17:09	20.9	7.99	27.6	6.98	6.94	8.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	15:34	22.1	7.97	27.6	7.27	6.26	7
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	15:34	22.1	7.96	27.7	7.29	6.27	7
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	6.6	2	1	15:34	22.2	7.96	17.7	7.17	6.87	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	6.6	2	2	15:34	22	7.97	17.9	7.18	6.89	7.5
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	12.2	3	1	15:34	21.9	8.1	27.4	7.06	7.11	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	12.2	3	2	15:34	22	8.11	27.2	7.03	7.1	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	15:55	22.3	8.06	27.6	7.26	6.29	7.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	15:55	22.4	8.05	27.7	7.27	6.31	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.8	2	1	15:55	22.3	7.91	27.9	7.19	6.76	7.9
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.8	2	2	15:55	22.1	7.95	27.8	7.16	6.77	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.6	3	1	15:55	22.4	7.99	27.6	7.02	6.92	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.6	3	2	15:55	22.6	8.01	27.7	7.03	6.94	8.5
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	15:15	22.1	8.02	27.7	7.16	6.46	7.5
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	15:15	22.4	8.01	27.9	7.13	6.47	7.7
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.3	2	1	15:15	22	7.92	27.7	7.06	6.77	7.9
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.3	2	2	15:15	21.8	7.93	27.8	7.07	6.79	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	13.6	3	1	15:15	21.7	8.06	27.9	7	7.01	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	13.6	3	2	15:15	21.9	8.07	27.7	6.98	7.03	7.9
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	16:10	22.3	7.93	27.6	7.16	6.36	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	16:10	22.5	7.95	27.7	7.12	6.37	7.1
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.4	2	1	16:10	22.2	7.96	27.9	7.06	6.77	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.4	2	2	16:10	22	7.97	28	7.03	6.79	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	9.8	3	1	16:10	22.1	8.06	27.7	7.02	6.89	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	9.8	3	2	16:10	22	8.09	27.7	7.01	6.9	8.1

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	16:38	21.7	7.19	27.6	7.11	6.26	7.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	16:38	21.9	7.2	27.9	7.14	6.27	7.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	16:38						
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	16:38						
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4	3	1	16:38	22.2	8.06	27.6	7.09	6.66	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4	3	2	16:38	22.4	8.04	27.7	7.06	6.62	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	16:27	22.4	8.03	27.6	7.14	6.93	7.8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	16:27	22.3	8.02	27.7	7.17	6.96	7.5
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	16:27						
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	16:27						
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.4	3	1	16:27	22.5	7.91	27.9	7.02	7.06	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.4	3	2	16:27	22.3	7.93	27.7	7	7.07	8.3
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	16:53	21	8.1	27.7	7.16	6.82	7.9
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	16:53	21.4	8.06	27.9	7.17	6.83	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.5	2	1	16:53	21.7	8.14	28.1	7.1	7.11	8.2
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.5	2	2	16:53	21.9	8.13	28.2	7.09	7.16	8.4
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	10	3	1	16:53	22.4	8.12	27.6	7.02	7.21	8
TMCLKL	HY/2012/08	2015-04-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	10	3	2	16:53	22.1	8.15	27.8	7.05	7.17	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	14:42	21.2	8.05	28.1	7.18	7.09	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	14:42	21.1	8.07	28.1	7.22	7.11	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS4	Middle	10.3	2	1	14:42	21.2	8.16	28.2	7.04	7.25	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS4	Middle	10.3	2	2	14:42	21.2	8.17	28.3	7.07	7.21	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.5	3	1	14:42	21.4	8.22	28.2	6.95	7.29	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.5	3	2	14:42	21.4	8.23	28.3	6.97	7.26	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	11:27	21.2	7.93	27.9	7.25	7.11	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	11:27	21.2	7.94	28.1	7.22	7.06	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	1	11:27	21.3	8.07	28	7.15	7.27	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	2	11:27	21.4	8.08	28.2	7.13	7.25	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.6	3	1	11:27	21.3	8.14	28.5	7.07	7.31	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.6	3	2	11:27	21.3	8.15	28.3	7.1	7.28	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	13:54	21.2	8.04	28.1	7.23	6.92	7.9
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	13:54	21.2	8.05	28.1	7.19	6.95	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS12	Middle	7.2	2	1	13:54	21.1	8.13	28.1	7.12	7	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS12	Middle	7.2	2	2	13:54	21.1	8.14	28.2	7.1	7.04	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.3	3	1	13:54	21.4	8.23	28.3	6.95	7.12	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.3	3	2	13:54	21.3	8.22	28.5	6.99	7.09	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	13:30	21.1	8.01	28.2	7.29	7	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	13:30	20.9	8.01	28.1	7.33	6.98	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS13	Middle	5.8	2	1	13:30	21.2	8.11	28.4	7.17	7.02	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS13	Middle	5.8	2	2	13:30	21.1	8.12	28.3	7.2	7.05	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.6	3	1	13:30	21.3	7.96	28.3	7.11	7.09	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.6	3	2	13:30	21.3	7.95	28.4	7.08	7.11	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	14:18	21.2	7.93	28.2	7.25	7	7.8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	14:18	21.2	7.94	28.2	7.22	7.02	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS14	Middle	7.7	2	1	14:18	21.4	8.01	28.4	7.14	7.12	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS14	Middle	7.7	2	2	14:18	21.2	8.02	28.3	7.17	7.15	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS14	Bottom	14.4	3	1	14:18	21.4	8.14	28.3	7.08	7.21	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS14	Bottom	14.4	3	2	14:18	21.2	8.15	28.4	7.06	7.26	8.7
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	13:09	21.2	8.14	28.1	7.26	7.09	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	13:09	21.1	8.12	28	7.3	7.05	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS15	Middle	5.9	2	1	13:09	21.3	8.05	28.2	7.12	7.13	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS15	Middle	5.9	2	2	13:09	21.2	8.07	28	7.15	7.11	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.8	3	1	13:09	21.5	7.96	28.2	7.04	7.19	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.8	3	2	13:09	21.5	7.97	28.2	7.07	7.17	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	12:25	21.2	7.99	28.1	7.32	7.05	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	12:25	21.3	7.96	28	7.3	7	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	12:25						
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	12:25						

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.7	3	1	12:25	21.2	8.11	28	7.26	7.11	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.7	3	2	12:25	21.1	8.12	28.2	7.29	7.13	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	12:48	21.1	7.95	28.2	7.1	7.02	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	12:48	21.2	7.95	28.3	7.14	7	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	12:48						
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	12:48						
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.3	3	1	12:48	21.2	8.1	28.5	7.04	7.1	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.3	3	2	12:48	21.2	8.11	28.4	7.02	7.12	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	11:54	21.3	8.1	27.9	7.18	7	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	11:54	21.3	8.11	28.1	7.2	6.96	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.9	2	1	11:54	21.2	8.01	28.1	7.05	7.01	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.9	2	2	11:54	21.3	7.99	28.3	7.08	7.04	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.7	3	1	11:54	21.4	7.81	28.3	6.99	7.09	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.7	3	2	11:54	21.4	7.82	28.4	7.01	7.12	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	18:29	21	8.06	28	7.06	7.2	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	18:29	21.1	8.08	27.9	7.08	7.22	8.5
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.2	2	1	18:29	21.2	8.15	28.1	6.93	7.36	8.7
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.2	2	2	18:29	21.3	8.17	28.2	6.95	7.34	8.9
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS4	Bottom	19.3	3	1	18:29	21.3	8.24	28.3	6.84	7.4	9
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS4	Bottom	19.3	3	2	18:29	21.4	8.22	28.4	6.86	7.42	9.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	20:50	21	7.92	28	7.13	7.23	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	20:50	21.1	7.94	27.9	7.11	7.25	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.7	2	1	20:50	21.2	8.06	28.1	7.04	7.36	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.7	2	2	20:50	21.3	8.08	28.2	7.02	7.38	8.7
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.4	3	1	20:50	21.4	8.13	28.3	6.95	7.43	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.4	3	2	20:50	21.3	8.15	28.3	6.97	7.41	8.7
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	19:08	21	8.03	28	7.11	7.04	7.8
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	19:08	21	8.05	28.1	7.07	7.06	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	1	19:08	21.1	8.12	28.2	7	7.12	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	2	19:08	21.2	8.14	28.3	6.98	7.14	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.1	3	1	19:08	21.3	8.22	28.4	6.91	7.22	8.7
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.1	3	2	19:08	21.4	8.2	28.5	6.89	7.2	8.5
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	19:28	20.9	8	28.1	7.19	7.09	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	19:28	21	8.02	28.2	7.21	7.11	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.7	2	1	19:28	21.1	8.12	28.3	7.06	7.14	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.7	2	2	19:28	21.2	8.1	28.3	7.08	7.16	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.4	3	1	19:28	21.3	7.94	28.4	7	7.2	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.4	3	2	19:28	21.4	7.96	28.5	6.98	7.22	8.7
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	15:48	21.1	7.94	28.1	7.14	7.11	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	15:48	21.2	7.92	28.2	7.12	7.13	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.6	2	1	15:48	21.3	8	28.3	7.03	7.23	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.6	2	2	15:48	21.4	8.02	28.3	7.05	7.25	8.5
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS14	Bottom	14.2	3	1	15:48	21.5	8.13	28.4	6.97	7.36	9
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS14	Bottom	14.2	3	2	15:48	21.5	8.15	28.5	6.95	7.38	8.8
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	19:45	21.1	8.13	28	7.13	7.21	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	19:45	21.2	8.11	28	7.15	7.19	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.8	2	1	19:45	21.3	8.06	28.1	7.02	7.24	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.8	2	2	19:45	21.3	8.08	28.2	7.04	7.26	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.6	3	1	19:45	21.4	7.93	28.3	6.93	7.3	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.6	3	2	19:45	21.5	7.97	28.4	6.95	7.32	8.1
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	20:15	21.1	7.98	28	7.21	7.17	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	20:15	21.2	7.96	28	7.19	7.15	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	20:15						
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	20:15						
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.5	3	1	20:15	21.2	8.12	28.1	7.15	7.24	8.6
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.5	3	2	20:15	21.3	8.14	28.2	7.17	7.26	8.7
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	20:00	21	7.96	28.1	7	7.13	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	20:00	21	7.94	28.2	7.02	7.16	8.3



Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	20:00						
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	20:00						
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	1	20:00	21.1	8.09	28.3	6.93	7.24	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	2	20:00	21.2	8.11	28.4	6.91	7.22	8.5
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	20:35	21.1	8.11	28.1	7.06	7.11	8.2
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	20:35	21.2	8.13	28	7.08	7.09	8.5
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.7	2	1	20:35	21.3	8	28.2	6.95	7.12	8
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.7	2	2	20:35	21.3	7.98	28.3	6.93	7.14	8.3
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.4	3	1	20:35	21.4	7.83	28.4	6.88	7.2	8.4
TMCLKL	HY/2012/08	2015-04-13	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.4	3	2	20:35	21.5	7.81	28.4	6.86	7.22	8.1
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	17:01	21.1	7.99	28.1	7.04	7.23	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	17:01	21.1	7.98	28	7.02	7.26	8.3
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS4	Middle	9.7	2	1	17:01	21.2	8.08	28.1	6.91	7.48	8.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS4	Middle	9.7	2	2	17:01	21.3	8.06	28.1	6.89	7.44	8.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.4	3	1	17:01	21.4	8.1	28.2	6.85	7.7	8.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.4	3	2	17:01	21.4	8.11	28.4	6.81	7.74	8.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	14:19	21.3	7.98	27.8	7.37	6.85	7.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	14:19	21.3	7.97	28	7.33	6.9	7.8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	1	14:19	21.2	8	28.2	7.22	6.98	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	2	14:19	21.3	8.02	28.1	7.19	7.02	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.6	3	1	14:19	21.3	8.08	28.3	6.97	7.22	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.6	3	2	14:19	21.4	8.07	28.2	6.92	7.19	8.1
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	16:20	21.2	7.98	28.2	7.15	7.07	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	16:20	21.1	8	28.1	7.11	7.1	8.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	1	16:20	21.2	8.04	28.1	7.06	7.25	8.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	2	16:20	21.2	8.03	28.2	7.09	7.3	8.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.6	3	1	16:20	21.3	8.1	28.3	6.98	7.45	8.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.6	3	2	16:20	21.3	8.11	28.4	6.95	7.49	8.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	15:59	21.2	8.03	28	7.19	7.07	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	15:59	21.1	8.04	27.9	7.15	7.1	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS13	Middle	5.9	2	1	15:59	21.3	8.08	28.2	7.12	7.2	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS13	Middle	5.9	2	2	15:59	21.2	8.08	28.2	7.08	7.16	8.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.8	3	1	15:59	21.3	8.03	28.4	6.9	7.3	8.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.8	3	2	15:59	21.4	8.04	28.3	6.93	7.35	8.3
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	16:40	21.3	8.02	27.9	7.08	7.1	7.8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	16:40	21.2	8.01	28	7.05	7.14	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS14	Middle	7.5	2	1	16:40	21.2	8.06	28	6.97	7.28	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS14	Middle	7.5	2	2	16:40	21.3	8.07	28.1	6.99	7.33	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS14	Bottom	14	3	1	16:40	21.4	8.08	28.2	6.9	7.5	8.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS14	Bottom	14	3	2	16:40	21.5	8.09	28.3	6.86	7.53	9
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	15:40	21.2	8.08	28	7.11	7.13	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	15:40	21.2	8.09	28.1	7.09	7.19	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS15	Middle	6	2	1	15:40	21.3	8.12	28.2	7.02	7.28	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS15	Middle	6	2	2	15:40	21.2	8.11	28	7.06	7.31	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS15	Bottom	11	3	1	15:40	21.3	8.1	28.1	6.89	7.53	8.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	IS15	Bottom	11	3	2	15:40	21.3	8.09	28.2	6.92	7.49	8.8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	15:08	21.2	8.01	28.1	7.16	6.96	7.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	15:08	21.3	8	28	7.19	7.01	7.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	15:08						
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	15:08						
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.5	3	1	15:08	21.2	8.05	28.1	7.08	7.17	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.5	3	2	15:08	21.4	8.07	28.2	7.05	7.2	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	15:24	21.2	8.03	28	7.04	7.11	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	15:24	21.3	8.04	28	7.08	7.14	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	15:24						
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	15:24						
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.5	3	1	15:24	21.4	8.08	28.2	7.01	7.29	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.5	3	2	15:24	21.2	8.07	28.1	6.99	7.34	8.1

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	14:43	21.3	7.93	28	7.23	6.81	7.8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	14:43	21.2	7.95	28.1	7.27	6.78	7.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.7	2	1	14:43	21.3	7.98	28.1	7.15	6.94	7.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.7	2	2	14:43	21.2	8	28.2	7.11	6.97	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.4	3	1	14:43	21.4	8.1	28.2	7.02	7.13	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.4	3	2	14:43	21.3	8.08	28.3	7	7.08	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	08:53	21.2	7.98	28	6.93	7.34	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	08:53	21.3	8	28.1	6.91	7.4	8.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.1	2	1	08:53	21.3	8.07	28.2	6.8	7.61	8.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.1	2	2	08:53	21.4	8.08	28.3	6.77	7.55	8.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS4	Bottom	19.2	3	1	08:53	21.4	8.11	28.4	6.73	7.8	8.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS4	Bottom	19.2	3	2	08:53	21.5	8.12	28.5	6.7	7.86	8.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	11:44	21.4	7.98	28	7.16	6.97	7.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	11:44	21.3	7.96	28	7.19	7.02	7.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.7	2	1	11:44	21.4	8.01	28.1	7.1	7.09	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.7	2	2	11:44	21.4	8.03	28.2	7.07	7.15	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.4	3	1	11:44	21.4	8.07	28.4	6.86	7.34	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.4	3	2	11:44	21.5	8.09	28.4	6.82	7.26	8.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	09:33	21.2	7.99	28	7.04	7.18	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	09:33	21.3	8	28.1	7.01	7.23	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.2	2	1	09:33	21.3	8.03	28.2	6.94	7.36	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.2	2	2	09:33	21.4	8.05	28.2	6.95	7.42	8.3
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.4	3	1	09:33	21.5	8.11	28.4	6.86	7.58	8.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.4	3	2	09:33	21.5	8.12	28.4	6.83	7.62	8.8
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	09:52	21.2	8.04	28	7.07	7.13	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	09:52	21.2	8.06	28.1	7.05	7.19	8.3
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.8	2	1	09:52	21.2	8.07	28.1	7	7.25	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.8	2	2	09:52	21.3	8.08	28.2	6.97	7.31	8.1
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.6	3	1	09:52	21.4	8.04	28.3	6.82	7.44	8.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.6	3	2	09:52	21.4	8.05	28.4	6.8	7.5	8.8
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	09:14	21.3	8.01	28	6.97	7.2	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	09:14	21.3	8.03	28	6.95	7.27	8.3
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.4	2	1	09:14	21.4	8.05	28.1	6.88	7.4	8.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.4	2	2	09:14	21.4	8.06	28.2	6.85	7.46	8.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS14	Bottom	13.8	3	1	09:14	21.5	8.09	28.3	6.78	7.6	8.6
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS14	Bottom	13.8	3	2	09:14	21.5	8.1	28.4	6.75	7.66	8.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	10:12	21.2	8.09	28.1	7.01	7.24	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	10:12	21.3	8.1	28.1	6.98	7.33	8.3
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.9	2	1	10:12	21.3	8.14	28.1	6.94	7.39	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.9	2	2	10:12	21.3	8.13	28.2	6.92	7.44	8.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.8	3	1	10:12	21.3	8.09	28.3	6.76	7.64	8.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.8	3	2	10:12	21.4	8.1	28.3	6.79	7.58	8.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	10:50	21.3	7.99	28	7.08	7.07	7.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	10:50	21.4	8.02	28.1	7.05	7.12	7.8
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	10:50						
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	10:50						
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.3	3	1	10:50	21.4	8.07	28.2	6.97	7.28	8.2
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.3	3	2	10:50	21.4	8.09	28.2	6.94	7.35	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	10:32	21.3	8.04	28	6.95	7.2	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	10:32	21.3	8.05	28.1	6.97	7.27	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	10:32						
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	10:32						
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.3	3	1	10:32	21.3	8.07	28.1	6.9	7.4	8.5
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.3	3	2	10:32	21.4	8.09	28.2	6.87	7.48	8.3
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	11:14	21.4	7.94	28.1	7.11	6.94	7.9
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	11:14	21.4	7.96	28.1	7.13	6.89	7.7
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.6	2	1	11:14	21.4	7.99	28.2	7.04	7.05	8
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.6	2	2	11:14	21.4	8	28.2	7.01	7.08	8.2

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.2	3	1	11:14	21.5	8.09	28.3	6.91	7.23	8.4
TMCLKL	HY/2012/08	2015-04-15	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.2	3	2	11:14	21.5	8.1	28.4	6.97	7.17	8.1
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	19:09	21.4	7.94	28	7.04	7.06	7.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	19:09	21.4	7.96	28.1	7.06	7.08	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS4	Middle	10	2	1	19:09	21.5	8.13	28.2	6.93	6.93	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS4	Middle	10	2	2	19:09	21.6	8.11	28.3	6.95	6.95	7.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS4	Bottom	19	3	1	19:09	21.7	8.04	28.4	6.83	6.88	7.5
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS4	Bottom	19	3	2	19:09	21.8	8.06	28.4	6.85	6.86	7.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	16:16	21.4	7.94	28	7.16	6.93	7.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	16:16	21.5	7.96	28.1	7.18	6.95	7.5
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	1	16:16	21.6	8.03	28.2	7.04	7.08	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	2	16:16	21.5	8.01	28.2	7.06	7.1	7.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.5	3	1	16:16	21.7	8.12	28.3	6.93	7.14	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.5	3	2	16:16	21.7	8.1	28.4	6.95	7.16	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	18:39	21.4	7.94	28	7.12	7.11	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	18:39	21.5	7.96	28	7.1	7.13	8.1
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	1	18:39	21.6	8.03	28.1	6.93	6.94	7.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	2	18:39	21.7	8.05	28.2	6.95	6.92	7.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.5	3	1	18:39	21.8	8.11	28.3	6.81	6.8	7.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.5	3	2	18:39	21.9	8.09	28.4	6.83	6.83	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	18:18	21.5	7.96	28.1	7.14	7.03	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	18:18	21.6	7.94	28.2	7.16	7.05	8.1
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS13	Middle	5.8	2	1	18:18	21.7	8.03	28.3	7.03	7.13	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS13	Middle	5.8	2	2	18:18	21.7	8.05	28.3	7.05	7.15	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.5	3	1	18:18	21.8	8.13	28.4	6.86	7.44	8.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.5	3	2	18:18	21.7	8.11	28.5	6.88	7.42	8.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	18:54	21.5	8.06	28.1	6.99	7.13	7.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	18:54	21.5	8.04	28.2	7.01	7.15	7.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS14	Middle	7.3	2	1	18:54	21.6	8.13	28.3	7.09	7	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS14	Middle	7.3	2	2	18:54	21.7	8.11	28.3	7.11	7.02	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS14	Bottom	13.5	3	1	18:54	21.7	8.04	28.4	6.82	6.92	7.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS14	Bottom	13.5	3	2	18:54	21.8	8.06	28.5	6.84	6.94	7.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	17:56	21.4	8.04	28.1	7.02	7.22	8.3
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	17:56	21.4	8.06	28.2	7.04	7.24	8.1
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS15	Middle	5.8	2	1	17:56	21.5	8.13	28.3	6.93	7.33	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS15	Middle	5.8	2	2	17:56	21.5	8.15	28.3	6.95	7.35	8.3
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.6	3	1	17:56	21.6	7.96	28.4	6.83	7.46	8.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.6	3	2	17:56	21.7	7.98	28.5	6.81	7.48	8.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	17:19	21.5	7.94	28	7.09	7	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	17:19	21.6	7.96	28	7.11	7.02	8.3
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	17:19						
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	17:19						
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.1	3	1	17:19	21.6	7.77	28.1	7	7.13	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.1	3	2	17:19	21.6	7.79	28.2	6.98	7.15	8.1
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	17:41	21.5	7.93	28	6.97	7.2	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	17:41	21.6	7.95	28	6.99	7.18	8.5
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	17:41						
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	17:41						
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.3	3	1	17:41	21.7	8.03	28.1	6.74	7.34	8.3
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.3	3	2	17:41	21.8	8.05	28.2	6.76	7.32	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	16:53	21.4	8.06	28.1	7.23	6.83	7.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	16:53	21.4	8.07	28.2	7.21	6.85	7.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.6	2	1	16:53	21.5	8.13	28.3	7.17	6.92	7.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.6	2	2	16:53	21.6	8.11	28.3	7.15	6.94	7.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.1	3	1	16:53	21.7	8	28.4	7.04	7.06	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.1	3	2	16:53	21.8	7.98	28.5	7.06	7.08	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	10:15	21.4	8.04	28.1	6.84	7.4	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	10:15	21.3	8.06	28.2	6.82	7.46	8.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS4	Middle	9.9	2	1	10:15	21.5	8.13	28.4	6.71	7.67	8.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS4	Middle	9.9	2	2	10:15	21.4	8.14	28.3	6.68	7.61	8.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS4	Bottom	18.8	3	1	10:15	21.6	8.17	28.5	6.64	7.86	9.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS4	Bottom	18.8	3	2	10:15	21.5	8.18	28.6	6.61	7.92	9.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	13:27	21.5	8.04	28	7.07	7.03	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	13:27	21.4	8.02	28.1	7.1	7.08	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.6	2	1	13:27	21.5	8.07	28.2	7.01	7.15	8.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.6	2	2	13:27	21.4	8.09	28.3	6.98	7.21	8.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.2	3	1	13:27	21.5	8.13	28.5	6.77	7.4	8.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.2	3	2	13:27	21.6	8.15	28.4	6.73	7.32	8.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	11:03	21.3	8.05	28.1	6.95	7.24	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	11:03	21.4	8.06	28.2	6.92	7.29	8.3
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	1	11:03	21.5	8.09	28.3	6.85	7.42	8.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	2	11:03	21.4	8.11	28.2	6.86	7.48	8.5
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.2	3	1	11:03	21.5	8.17	28.4	6.77	7.64	8.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.2	3	2	11:03	21.6	8.18	28.5	6.74	7.68	8.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	11:27	21.3	8.1	28.1	6.98	7.19	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	11:27	21.2	8.12	28.2	6.96	7.25	8.3
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.6	2	1	11:27	21.4	8.13	28.3	6.91	7.31	8.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.6	2	2	11:27	21.4	8.14	28.2	6.88	7.37	8.5
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.2	3	1	11:27	21.5	8.1	28.4	6.73	7.5	8.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.2	3	2	11:27	21.4	8.11	28.5	6.71	7.56	8.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	10:39	21.4	8.07	28	6.88	7.26	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	10:39	21.3	8.09	28.1	6.86	7.33	8.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.2	2	1	10:39	21.4	8.11	28.2	6.79	7.46	8.7
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.2	2	2	10:39	21.5	8.12	28.3	6.76	7.52	8.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS14	Bottom	13.4	3	1	10:39	21.6	8.15	28.5	6.69	7.66	9
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS14	Bottom	13.4	3	2	10:39	21.6	8.16	28.4	6.66	7.72	9.3
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	11:51	21.3	8.15	28.1	6.92	7.3	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	11:51	21.4	8.16	28.2	6.89	7.39	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.7	2	1	11:51	21.4	8.2	28.3	6.85	7.45	8.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.7	2	2	11:51	21.3	8.19	28.2	6.83	7.5	8.5
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.4	3	1	11:51	21.5	8.15	28.3	6.67	7.7	8.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.4	3	2	11:51	21.4	8.16	28.4	6.7	7.64	9.1
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	12:39	21.4	8.05	28.1	6.99	7.13	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	12:39	21.5	8.08	28.2	6.96	7.18	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	12:39						
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	12:39						
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.9	3	1	12:39	21.5	8.13	28.3	6.88	7.34	8.6
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.9	3	2	12:39	21.4	8.15	28.2	6.85	7.41	8.9
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	12:15	21.4	8.1	28.1	6.86	7.26	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	12:15	21.4	8.11	28.2	6.88	7.33	8.3
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	12:15						
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	12:15						
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	1	12:15	21.4	8.13	28.3	6.81	7.46	8.8
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	2	12:15	21.5	8.15	28.2	6.78	7.54	8.5
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	13:03	21.4	8	28.1	7.02	7	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	13:03	21.5	8.02	28.2	7.04	6.95	8.4
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.4	2	1	13:03	21.5	8.05	28.4	6.95	7.11	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.4	2	2	13:03	21.4	8.06	28.3	6.92	7.14	8
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	9.8	3	1	13:03	21.6	8.15	28.4	6.82	7.29	8.2
TMCLKL	HY/2012/08	2015-04-17	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	9.8	3	2	13:03	21.5	8.16	28.5	6.78	7.23	8.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	21:21	20.1	8.17	27.9	7.09	7.04	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	21:21	20.2	8.15	28	7.07	7.06	8.2
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS4	Middle	10.4	2	1	21:21	20.3	8.04	28.1	7	7.13	8.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS4	Middle	10.4	2	2	21:21	20.3	8.06	28.2	6.98	7.15	8.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.8	3	1	21:21	20.4	8.11	28.3	6.83	7.23	8.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.8	3	2	21:21	20.5	8.09	28.4	6.85	7.25	8.7

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	18:56	20	7.96	28	7.16	7.03	6.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	18:56	19.9	7.98	28.1	7.14	7.05	6.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	1	18:56	20.1	8.03	28.2	7.04	7.12	8.2
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS6	Middle	5.8	2	2	18:56	20.2	8.05	28.3	7.06	7.14	8.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.5	3	1	18:56	20.3	8.11	28.4	6.93	7.26	8.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	CS6	Bottom	10.5	3	2	18:56	20.4	8.13	28.4	6.91	7.24	8.7
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	20:56	20	8.13	28.1	7.12	6.83	7.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	20:56	20.1	8.11	28.2	7.14	6.81	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	1	20:56	20.2	7.96	28.3	7.02	6.75	7.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	2	20:56	20.3	7.98	28.3	7.04	6.73	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.5	3	1	20:56	20.4	8.03	28.4	6.95	6.55	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.5	3	2	20:56	20.5	8.05	28.4	6.97	6.57	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	20:41	20	7.99	28.1	7.16	6.73	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	20:41	20	8.01	28.2	7.18	6.75	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS13	Middle	5.9	2	1	20:41	20.1	7.83	28.3	7.05	6.84	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS13	Middle	5.9	2	2	20:41	20.2	7.85	28.4	7.07	6.82	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.7	3	1	20:41	20.3	7.93	28.5	6.93	6.95	7.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.7	3	2	20:41	20.4	7.95	28.4	6.91	6.97	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	21:09	20.1	8.23	28.1	7.17	6.73	7.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	21:09	20.2	8.21	28.1	7.19	6.75	7.3
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS14	Middle	7.8	2	1	21:09	20.2	7.96	28.2	7.11	6.83	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS14	Middle	7.8	2	2	21:09	20.3	7.94	28.3	7.09	6.85	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS14	Bottom	14.6	3	1	21:09	20.4	8.13	28.4	7.03	6.93	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS14	Bottom	14.6	3	2	21:09	20.5	8.11	28.3	7.05	6.95	8.3
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	20:19	20	8.11	28	7.21	6.94	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	20:19	19.9	8.09	28.1	7.23	6.92	8.3
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS15	Middle	5.8	2	1	20:19	20.1	8.13	28.2	7.17	7.06	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS15	Middle	5.8	2	2	20:19	20.2	8.15	28.3	7.15	7.04	8.1
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.6	3	1	20:19	20.3	8.09	28.4	7.04	7.11	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.6	3	2	20:19	20.4	8.11	28.5	7.06	7.09	8.3
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	19:49	20.1	8.12	28	7.17	6.83	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	19:49	20.2	8.14	28	7.19	6.85	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	19:49						
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	19:49						
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.6	3	1	19:49	20.3	7.99	28.1	7.06	6.92	8.2
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.6	3	2	19:49	20.4	8.01	28.2	7.08	6.9	8.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	20:04	20.1	7.95	28	7.12	6.83	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	20:04	20.2	7.97	28.1	7.14	6.81	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	20:04						
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	20:04						
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.4	3	1	20:04	20.3	8.13	28.2	7.06	6.99	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.4	3	2	20:04	20.4	8.15	28.3	7.04	7.01	8.1
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	19:18	20	7.83	28.1	7.04	6.73	7.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	19:18	20.1	7.85	28.2	7.06	6.75	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.9	2	1	19:18	20.2	8.06	28.3	7	6.82	8.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR10A	Middle	5.9	2	2	19:18	20.3	8.08	28.3	6.98	6.84	9
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.7	3	1	19:18	20.4	8.12	28.4	6.83	6.95	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Flood	Fine	Small Wave	SR10A	Bottom	10.7	3	2	19:18	20.4	8.14	28.5	6.85	6.97	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	12:19	20.3	8.09	28	6.88	6.84	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	12:19	20.2	8.1	28.1	6.93	6.91	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.1	2	1	12:19	20.3	8.13	28.2	6.82	7.06	8.2
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.1	2	2	12:19	20.4	8.15	28.3	6.8	7.11	8.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.2	3	1	12:19	20.5	8.07	28.5	6.73	7.34	8.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.2	3	2	12:19	20.6	8.09	28.4	6.71	7.27	8.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	15:12	20.3	8.01	28	7.08	6.84	7.7
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	15:12	20.4	8.03	28	7.04	6.92	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.6	2	1	15:12	20.4	7.97	28.1	7.01	7.06	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.6	2	2	15:12	20.4	7.99	28.2	6.97	7.11	8.3

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.2	3	1	15:12	20.5	8.07	28.3	6.81	7.18	8.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.2	3	2	15:12	20.5	8.08	28.4	6.77	7.25	8.1
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	13:00	20.3	8.11	28	7.11	6.71	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	13:00	20.4	8.1	28	7.09	6.78	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	1	13:00	20.4	8.12	28.1	7	6.83	7.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	2	13:00	20.4	8.14	28.1	6.96	6.9	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	1	13:00	20.5	8.09	28.2	6.86	6.74	7.7
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	2	13:00	20.5	8.11	28.3	6.82	6.67	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	13:20	20.4	7.94	28	7.09	6.66	7.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	13:20	20.4	7.95	28	7.06	6.7	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.7	2	1	13:20	20.4	7.89	28.1	7.01	6.75	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.7	2	2	13:20	20.4	7.9	28.2	6.97	6.79	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.4	3	1	13:20	20.5	7.82	28.3	6.88	6.86	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.4	3	2	13:20	20.6	7.84	28.3	6.85	6.93	7.7
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	12:41	20.3	8.13	28	7.06	6.67	7.4
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	12:41	20.3	8.15	27.9	7.02	6.74	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.6	2	1	12:41	20.4	8.09	28.1	6.94	6.88	7.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.6	2	2	12:41	20.4	8.1	28.1	6.91	6.95	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.2	3	1	12:41	20.5	8.12	28.3	6.88	7.13	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.2	3	2	12:41	20.5	8.13	28.3	6.85	7.2	8.3
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	13:42	20.4	7.97	28	7.16	6.73	7.7
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	13:42	20.3	8	28.1	7.13	6.8	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.6	2	1	13:42	20.4	8.04	28.2	7.07	6.87	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.6	2	2	13:42	20.4	8.07	28.2	7.05	6.95	8.2
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.2	3	1	13:42	20.5	7.89	28.3	6.94	7.04	8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.2	3	2	13:42	20.5	7.91	28.4	6.91	7.1	8.2
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	14:19	20.4	8.09	27.9	7.01	6.73	8.6
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	14:19	20.3	8.11	28	6.96	6.8	8.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	14:19						
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	14:19						
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.3	3	1	14:19	20.4	8.07	28.1	6.85	6.96	8.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.3	3	2	14:19	20.4	8.08	28.1	6.83	7.03	8.2
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	14:01	20.4	7.92	28	7.03	6.77	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	14:01	20.4	7.94	28	6.99	6.85	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	14:01						
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	14:01						
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.1	3	1	14:01	20.4	8.07	28.1	6.92	6.93	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.1	3	2	14:01	20.4	8.09	28.2	6.89	7.01	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	14:42	20.4	7.87	28.1	7.09	6.58	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	14:42	20.4	7.89	28.1	7.11	6.64	7.9
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.7	2	1	14:42	20.4	7.89	28.1	7.03	6.7	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.7	2	2	14:42	20.4	7.91	28.2	7	6.77	7.5
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	10.4	3	1	14:42	20.5	8.01	28.3	6.92	6.85	7.8
TMCLKL	HY/2012/08	2015-04-20	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	10.4	3	2	14:42	20.5	7.99	28.4	6.9	6.93	7.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	10:09	22	7.96	28	7.26	6.92	7.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	10:09	22	7.97	28.1	7.23	6.99	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.3	2	1	10:09	22.1	7.94	28.2	7.01	7.31	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.3	2	2	10:09	22.1	7.95	28.3	6.96	7.39	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.6	3	1	10:09	22.1	7.99	28.4	6.78	7.56	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.6	3	2	10:09	22.2	8	28.4	6.75	7.62	8.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	07:55	21.8	7.94	28.1	7.09	7.16	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	07:55	21.9	7.96	28	7.06	7.24	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.8	2	1	07:55	21.9	7.99	28.2	7.01	7.03	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.8	2	2	07:55	21.9	8	28.2	6.97	7.07	7.8
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.6	3	1	07:55	22	8.07	28.3	6.88	7.41	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.6	3	2	07:55	22	8.09	28.4	6.85	7.47	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	09:41	21.9	8.03	28	7.17	7.17	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	09:41	22	8.04	27.9	7.15	7.25	8.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.2	2	1	09:41	22	8	28.2	7.04	7.41	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.2	2	2	09:41	22	8.01	28.2	6.99	7.48	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.4	3	1	09:41	22.1	8.07	28.3	6.88	7.66	9.2
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.4	3	2	09:41	22.1	8.05	28.3	6.85	7.59	9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	09:23	21.9	7.99	28	7.14	7.27	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	09:23	21.9	8.01	28.1	7.11	7.21	8.2
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.9	2	1	09:23	21.9	8.07	28.2	7.03	7.34	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.9	2	2	09:23	22	8.09	28.2	7	7.42	8.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.8	3	1	09:23	22.1	8.1	28.3	6.94	7.51	8.6
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.8	3	2	09:23	22.1	8.11	28.3	6.91	7.58	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	09:50	22	7.99	28	7.21	6.97	7.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	09:50	22	8.01	28	7.17	7.04	7.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.7	2	1	09:50	22	8.04	28.1	7.08	7.26	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.7	2	2	09:50	22.1	8.06	28.2	7.05	7.33	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.4	3	1	09:50	22.1	8.08	28.3	6.87	7.54	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.4	3	2	09:50	22.2	8.09	28.4	6.89	7.48	9.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	09:06	21.9	8.07	28	7.04	7.16	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	09:06	22	8.09	28.1	7.09	7.23	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.8	2	1	09:06	22	8.13	28.1	6.99	7.3	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.8	2	2	09:06	22	8.14	28.2	6.96	7.37	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.6	3	1	09:06	22	8.11	28.2	6.83	7.49	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.6	3	2	09:06	22.1	8.13	28.3	6.81	7.42	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	08:38	21.8	7.99	28	7.03	7.02	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	08:38	21.9	8.01	28.1	7	7.1	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	08:38						
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	08:38						
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	1	08:38	21.9	8.02	28.1	6.94	7.18	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	2	08:38	21.9	8.03	28.2	6.91	7.26	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	08:52	21.9	8.03	28	6.97	7.07	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	08:52	21.9	8.04	27.9	7.01	7.15	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	08:52						
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	08:52						
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.2	3	1	08:52	22	8.01	28	6.9	7.19	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.2	3	2	08:52	22	8.03	28.1	6.87	7.27	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	08:16	21.8	7.98	28	7.14	7.07	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	08:16	21.8	7.99	28	7.11	7.13	8.2
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	5.9	2	1	08:16	21.8	8.01	28.1	7.07	7.01	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	5.9	2	2	08:16	21.9	8.02	28.2	7.03	6.96	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	10.8	3	1	08:16	22	8.05	28.3	6.96	7.29	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	10.8	3	2	08:16	22	8.07	28.3	6.93	7.35	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	13:46	21.9	7.95	28	7.12	7.04	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	13:46	22	7.94	27.9	7.1	7.1	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.2	2	1	13:46	22	7.93	28.1	6.89	7.44	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.2	2	2	13:46	22.1	7.94	28.2	6.85	7.5	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.4	3	1	13:46	22.1	8	28.2	6.62	7.67	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.4	3	2	13:46	22.1	7.98	28.2	6.65	7.7	9
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	16:30	22	7.96	28	6.96	7.25	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	16:30	21.9	7.95	28	6.93	7.32	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.7	2	1	16:30	22	7.98	28.1	6.9	7.14	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.7	2	2	16:30	21.9	7.99	28	6.85	7.16	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.4	3	1	16:30	21.8	8.08	28.1	6.74	7.52	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.4	3	2	16:30	21.9	8.07	28.3	6.7	7.56	8.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	14:27	22	8.02	27.9	7.06	7.28	8.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	14:27	22	8.03	28	7.04	7.39	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	1	14:27	21.8	8.01	28.1	6.93	7.52	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	2	14:27	22	8.02	28	6.88	7.6	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	1	14:27	22	8.05	28.2	6.75	7.79	9.2
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	2	14:27	21.9	8.04	28.3	6.72	7.71	9.4

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	14:47	21.9	7.98	28.1	7.02	7.38	8.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	14:47	22	8	28	6.97	7.33	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.8	2	1	14:47	21.9	8.1	28	6.9	7.45	9
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.8	2	2	14:47	21.9	8.09	28.1	6.86	7.51	9.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.6	3	1	14:47	22	8.11	28.2	6.81	7.62	9.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	10.6	3	2	14:47	22.1	8.11	28.3	6.78	7.7	9.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	14:05	21.9	7.98	28.1	7.1	7.09	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	14:05	22	8	28	7.07	7.15	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.6	2	1	14:05	21.9	8.05	28	6.95	7.37	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	7.6	2	2	14:05	21.9	8.06	28.1	6.91	7.43	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.2	3	1	14:05	22.1	8.1	28.2	6.75	7.66	8.6
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	14.2	3	2	14:05	22	8.09	28.3	6.78	7.6	8.9
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	15:07	21.9	8.09	28.2	6.95	7.28	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	15:07	21.8	8.08	28.1	6.92	7.34	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.7	2	1	15:07	21.9	8.12	28	6.88	7.43	8.6
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.7	2	2	15:07	22	8.13	28.1	6.85	7.48	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.4	3	1	15:07	22.1	8.12	28.1	6.72	7.62	8.6
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.4	3	2	15:07	22.1	8.14	28.2	6.68	7.54	8.8
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	15:43	21.8	8	28.1	6.91	7.13	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	15:43	21.8	7.99	28.1	6.88	7.18	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	15:43						
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	15:43						
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.6	3	1	15:43	22	8.01	28.2	6.82	7.29	8.2
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.6	3	2	15:43	21.9	8.02	28.1	6.8	7.34	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	15:28	22	8.02	27.9	6.84	7.19	8.2
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	15:28	22	8.03	28.1	6.9	7.23	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	15:28						
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	15:28						
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4	3	1	15:28	21.9	8.02	28.1	6.77	7.3	8.4
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4	3	2	15:28	22	8.03	28.1	6.72	7.36	8.1
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	16:05	21.7	7.99	28.1	7.03	7.19	8
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	16:05	21.8	7.99	28	7	7.24	8.3
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.8	2	1	16:05	21.9	8	28	6.95	7.11	8.2
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.8	2	2	16:05	21.9	8.01	28.1	6.9	7.07	8.5
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	10.6	3	1	16:05	22	8.06	28.2	6.84	7.4	8.7
TMCLKL	HY/2012/08	2015-04-22	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	10.6	3	2	16:05	21.9	8.04	28.2	6.81	7.43	8.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	11:14	23.6	8.02	27.1	7.38	7.04	8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	11:14	23.4	8.04	27.1	7.39	7.09	7.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.3	2	1	11:14	23.3	8.01	27	7.22	7.01	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.3	2	2	11:14	23.3	7.98	27.2	7.26	7.11	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.5	3	1	11:14	23.1	8.01	26.9	7.2	7.05	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.5	3	2	11:14	23.3	8.04	27.2	7.21	7.15	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	08:32	23.5	8.04	27	7.41	6.87	7.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	08:32	23.5	8.01	26.9	7.45	6.9	7.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.7	2	1	08:32	23.5	8.06	27	7.28	6.88	7.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS6	Middle	5.7	2	2	08:32	23.5	8.05	27.2	7.3	6.92	8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.4	3	1	08:32	23.5	8.11	27.1	7.25	6.91	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	10.4	3	2	08:32	23.3	8.12	27.1	7.2	6.93	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	10:30	23.5	7.95	27	7.39	7.06	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	10:30	23.3	7.96	26.9	7.42	7.13	8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.1	2	1	10:30	23.6	7.98	27	7.4	7.07	8.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.1	2	2	10:30	23.4	7.99	27.2	7.42	7.15	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.2	3	1	10:30	23.4	8.02	27.1	7.38	7.08	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.2	3	2	10:30	23.1	8.01	27.1	7.4	7.1	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	10:13	23.2	8.01	27.4	7.44	7.08	7.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	10:13	23.4	8.02	27.2	7.41	7.13	8.1
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.6	2	1	10:13	23.5	8.08	27	7.39	7.01	8.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.6	2	2	10:13	23.4	8.1	27.1	7.38	7.16	8.3



Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.2	3	1	10:13	23.3	7.98	27.1	7.35	6.96	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.2	3	2	10:13	23.4	8.12	27.1	7.33	7.11	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	10:46	23.6	8.04	27	7.4	7.01	8.1
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	10:46	23.4	8.03	27.2	7.42	7.11	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.7	2	1	10:46	23.4	8.02	27.2	7.33	6.98	8.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS14	Middle	7.7	2	2	10:46	23.3	8.04	27.3	7.3	7.09	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.4	3	1	10:46	23.2	8.06	27.1	7.28	7.01	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	14.4	3	2	10:46	23.3	8.03	27.3	7.31	6.98	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	09:58	23.2	8.11	27.4	7.41	7.01	7.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	09:58	23.4	8.09	27.2	7.43	6.9	8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.9	2	1	09:58	23.4	8.06	26.8	7.24	7.04	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.9	2	2	09:58	23.6	8.08	27	7.21	6.89	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.8	3	1	09:58	23.2	8.09	26.9	7.18	7.01	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.8	3	2	09:58	23.5	8.07	27	7.2	6.81	8.7
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	09:30	23.4	8.01	27	7.44	7.08	8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	09:30	23.6	8.06	26.9	7.42	7.15	7.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	09:30						
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	09:30						
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.5	3	1	09:30	23.5	8.02	27.2	7.4	7.09	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.5	3	2	09:30	23.5	8.06	27	7.43	7.14	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	09:45	23.4	7.95	27.2	7.44	7.08	7.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	09:45	23.6	8.01	27.4	7.4	7.14	7.7
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	09:45						
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	09:45						
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.1	3	1	09:45	23.5	7.93	27.1	7.34	7.12	8
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.1	3	2	09:45	23.6	7.98	27.3	7.38	7.09	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	09:00	23.5	8.1	27.1	7.43	7.01	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	09:00	23.5	8.05	26.8	7.48	6.98	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	5.9	2	1	09:00	23.5	8.06	27.1	7.23	7.04	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	5.9	2	2	09:00	23.4	8.04	27	7.19	7.02	8.1
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	10.8	3	1	09:00	23.5	8.04	27.1	7.18	7.06	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	10.8	3	2	09:00	23.6	8.07	27.4	7.24	7.04	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	15:17	23.5	8.04	26.9	7.47	7.09	7.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	15:17	23.6	8.03	27	7.44	7.06	7.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	9.9	2	1	15:17	23.4	8.05	27	7.27	8.04	8.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	9.9	2	2	15:17	23.4	8.06	27.1	7.24	8.01	7.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	18.8	3	1	15:17	23.3	8.06	27.2	7.19	8.12	9.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	18.8	3	2	15:17	23.2	8.07	27.3	7.23	8.07	9.1
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	17:10	23.6	8.1	27.1	7.34	7.08	8
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	17:10	23.5	8.09	27.1	7.3	7.15	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.6	2	1	17:10	23.3	8.08	27.2	7.28	7.24	8.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	5.6	2	2	17:10	23.4	8.07	27.1	7.24	7.2	8.1
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.2	3	1	17:10	23.4	8.12	27.2	7.2	7.3	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	10.2	3	2	17:10	23.4	8.11	27.3	7.17	7.25	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	15:53	23.6	8.02	27	7.5	6.87	7.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	15:53	23.6	8.04	26.9	7.54	6.92	7.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	6.7	2	1	15:53	23.4	8.04	27.2	7.31	7.43	8.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	6.7	2	2	15:53	23.5	8.03	27.1	7.27	7.39	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	12.4	3	1	15:53	23.4	8.05	27.2	7.19	7.55	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	12.4	3	2	15:53	23.4	8.07	27.2	7.15	7.5	8.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	16:09	23.7	8.07	27	7.3	7.17	8
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	16:09	23.7	8.07	27.1	7.33	7.19	8.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.4	2	1	16:09	23.5	8.08	27.3	7.15	7.48	8.7
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.4	2	2	16:09	23.4	8.09	27.2	7.11	7.45	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	9.8	3	1	16:09	23.4	8.09	27.4	7.03	7.74	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	9.8	3	2	16:09	23.3	8.1	27.4	7.06	7.7	8.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	15:37	23.5	8.05	27	7.34	6.94	7.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	15:37	23.6	8.06	27	7.38	6.98	7.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	6.8	2	1	15:37	23.5	8.07	27.1	7.2	7.87	8.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	6.8	2	2	15:37	23.4	8.07	27	7.24	7.81	8.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	12.6	3	1	15:37	23.4	8.08	27.2	7.11	7.74	9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	12.6	3	2	15:37	23.4	8.07	27.2	7.07	7.7	9.3
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	16:25	23.6	8.07	27.1	7.24	7.38	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	16:25	23.6	8.08	27.1	7.28	7.35	8.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.6	2	1	16:25	23.3	8.09	27.3	7.09	7.44	8.7
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.6	2	2	16:25	23.2	8.09	27.3	7.05	7.4	8.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.2	3	1	16:25	23.3	8.1	27.3	7.04	7.57	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.2	3	2	16:25	23.4	8.11	27.4	7.01	7.5	8.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	16:56	23.5	8.09	27	7.36	7.39	8.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	16:56	23.4	8.08	26.9	7.33	7.31	8.7
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	16:56						
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	16:56						
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	1	16:56	23.2	8.1	27.2	7.13	7.58	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	2	16:56	23.3	8.08	27.1	7.08	7.54	8.5
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	16:43	23.6	8.06	27	7.18	7.54	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	16:43	23.7	8.07	27.1	7.15	7.5	8.7
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	16:43						
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	16:43						
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.8	3	1	16:43	23.5	8.09	27.2	7.11	7.66	8.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	3.8	3	2	16:43	23.4	8.1	27.3	7.08	7.62	8.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	17:42	23.6	8.1	27.1	7.45	6.87	7.8
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	17:42	23.5	8.11	27	7.49	6.84	7.9
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.4	2	1	17:42	23.4	8.09	27.2	7.19	7.17	8.2
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	5.4	2	2	17:42	23.3	8.1	27.2	7.15	7.1	8.4
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	9.8	3	1	17:42	23.3	8.12	27.1	7.14	7.29	8.6
TMCLKL	HY/2012/08	2015-04-24	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	9.8	3	2	17:42	23.4	8.11	27.2	7.18	7.25	8.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	14:20	25.5	8.15	25.3	9.28	8.04	9
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	14:20	25.4	8.15	25.3	9.24	8.08	9.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS4	Middle	11.6	2	1	14:20	24.5	8.16	25.9	8.41	7.99	8.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS4	Middle	11.6	2	2	14:20	24.5	8.15	25.9	8.45	7.92	9.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS4	Bottom	22.2	3	1	14:20	24.3	8.16	25.9	8.44	8.07	9.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS4	Bottom	22.2	3	2	14:20	24.4	8.17	26	8.47	8.14	9.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	11:37	24.5	8.07	25.5	8.69	5.41	6.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	11:37	24.4	8.07	25.6	8.71	5.46	6.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS6	Middle	6.5	2	1	11:37	24.4	8.07	26.4	7.66	4.84	7
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS6	Middle	6.5	2	2	11:37	24.5	8.08	26.4	7.7	4.89	7.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS6	Bottom	12	3	1	11:37	24.2	8.08	26.6	7.24	4.44	6.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	CS6	Bottom	12	3	2	11:37	24.3	8.08	26.6	7.28	4.47	7.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	13:36	25	8.14	25.7	9.49	7.06	8.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	13:36	25	8.15	25.7	9.45	7.01	8.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS12	Middle	6.7	2	1	13:36	24.5	8.15	26.4	8.82	6.03	7.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS12	Middle	6.7	2	2	13:36	24.5	8.16	26.4	8.79	6.09	7.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS12	Bottom	12.4	3	1	13:36	23.9	8.16	27.3	8.73	8.02	7.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS12	Bottom	12.4	3	2	13:36	24	8.16	27.3	8.76	8.09	8.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	13:19	25.1	8.14	25.9	9.33	4.6	6.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	13:19	25.1	8.15	25.9	9.36	4.66	6.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS13	Middle	6	2	1	13:19	24.7	8.15	26.1	9.02	5.55	6.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS13	Middle	6	2	2	13:19	24.9	8.15	26	9.05	5.5	6.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS13	Bottom	11	3	1	13:19	24.4	8.15	26.4	8.49	8.62	9.4
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS13	Bottom	11	3	2	13:19	24.3	8.14	26.5	8.45	8.58	9.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	13:53	24.9	8.15	25.9	9.03	7.81	8.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	13:53	24.8	8.16	25.8	9.08	7.78	8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS14	Middle	7.4	2	1	13:53	24.5	8.16	26	8.49	7.94	8.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS14	Middle	7.4	2	2	13:53	24.4	8.16	26	8.54	7.9	8.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS14	Bottom	13.8	3	1	13:53	24.3	8.15	26	8.36	8.09	9.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS14	Bottom	13.8	3	2	13:53	24.3	8.16	26	8.32	8.01	9.5

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	13:04	25.3	8.13	26	8.75	4.24	5.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	13:04	25.3	8.13	26	8.77	4.31	5.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS15	Middle	5.2	2	1	13:04	24.8	8.13	26.2	8.42	4.67	6.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS15	Middle	5.2	2	2	13:04	24.7	8.14	26.3	8.41	4.72	6.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS15	Bottom	9.4	3	1	13:04	24.4	8.14	26.5	8.21	5.1	6.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	IS15	Bottom	9.4	3	2	13:04	24.6	8.15	26.4	8.25	5.02	6.7
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	12:35	24.9	8.12	25.8	9.41	4.62	6.4
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	12:35	24.9	8.13	25.8	9.38	4.57	6.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	12:35						
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	12:35						
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR8	Bottom	3.5	3	1	12:35	24.7	8.12	26.1	8.88	6.33	7.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR8	Bottom	3.5	3	2	12:35	24.6	8.12	26.3	8.84	6.39	7.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	12:50	25.1	8.13	26.3	7.97	7.89	8.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	12:50	25.1	8.12	26.3	7.93	7.94	8.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	12:50						
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	12:50						
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR9	Bottom	3.8	3	1	12:50	24.3	8.14	26.7	7.71	6.59	7.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR9	Bottom	3.8	3	2	12:50	24.3	8.14	26.7	7.67	6.52	7.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	12:07	24.2	8.09	27.4	8.14	3.3	5.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	12:07	24.3	8.09	27.3	8.1	3.36	5.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR10A	Middle	7.6	2	1	12:07	24	8.09	27.5	7.29	3.35	5.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR10A	Middle	7.6	2	2	12:07	24	8.1	27.5	7.31	3.38	5.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR10A	Bottom	14.2	3	1	12:07	23.9	8.1	27.6	7.47	2.69	5.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Flood	Fine	Small Wave	SR10A	Bottom	14.2	3	2	12:07	23.9	8.1	27.6	7.49	2.74	5.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	18:37	25.4	8.14	24.4	10.23	3.73	5.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	18:37	25.3	8.14	24.3	10.27	3.67	5.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS4	Middle	11.2	2	1	18:37	24.4	8.13	25.8	8.47	2.91	4.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS4	Middle	11.2	2	2	18:37	24.4	8.13	25.9	8.54	2.87	4.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS4	Bottom	21.4	3	1	18:37	24.4	8.15	26	8.4	3.08	6.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS4	Bottom	21.4	3	2	18:37	24.4	8.15	26	8.48	3.14	6.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	21:09	25.5	8.13	24.6	10.64	2.89	5.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	21:09	25.5	8.14	24.7	10.71	2.8	5.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS6	Middle	7.6	2	1	21:09	25.5	8.14	24.8	10.49	3.9	5.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS6	Middle	7.6	2	2	21:09	25.5	8.14	24.9	10.6	4.31	5.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS6	Bottom	14.3	3	1	21:09	25.5	8.15	24.8	10.41	2.77	3.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	CS6	Bottom	14.3	3	2	21:09	25.5	8.15	24.8	10.44	2.83	4.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	19:13	25	8.13	24.6	9.91	3.32	5.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	19:13	24.9	8.13	24.5	9.95	3.28	5.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.3	2	1	19:13	24.5	8.14	25.7	8.61	2.54	5.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.3	2	2	19:13	24.5	8.14	25.7	8.64	2.63	5.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.7	3	1	19:13	24.1	8.13	26.7	7.88	2.92	5.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.7	3	2	19:13	24.1	8.13	26.7	7.91	2.83	5.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	19:34	25	8.14	26	9.51	3.89	5.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	19:34	25	8.14	26	9.6	3.84	5.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS13	Middle	6.4	2	1	19:34	24.5	8.15	26.5	8.71	3.12	7.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS13	Middle	6.4	2	2	19:34	24.5	8.15	26.6	8.75	3.05	7.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS13	Bottom	11.8	3	1	19:34	23.8	8.14	27.4	7.51	3.47	6.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS13	Bottom	11.8	3	2	19:34	23.8	8.14	27.4	7.5	3.39	6.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	19:02	25.3	8.13	24.7	9.05	3.05	4.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	19:02	25.3	8.14	24.7	9.42	3.11	4.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS14	Middle	8.1	2	1	19:02	24.4	8.14	25.8	8.27	3.09	5.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS14	Middle	8.1	2	2	19:02	24.4	8.14	26	8.34	3.03	5.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS14	Bottom	15.2	3	1	19:02	24.2	8.14	26.2	8.21	3.6	8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS14	Bottom	15.2	3	2	19:02	24.2	8.14	26.2	8.16	3.49	7.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	19:55	24.6	8.13	26.4	8.23	4.44	6.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	19:55	24.6	8.13	26.4	8.15	4.38	6.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.3	2	1	19:55	23.9	8.14	27.2	7.43	4.69	6.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.3	2	2	19:55	23.9	8.14	27.2	7.42	4.76	6.8

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS15	Bottom	9.7	3	1	19:55	23.8	8.14	27.5	7.49	3.62	6.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	IS15	Bottom	9.7	3	2	19:55	23.8	8.14	27.5	7.53	3.68	6.9
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	20:49	25.9	8.15	24.6	10.21	3.01	5.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	20:49	25.9	8.15	24.6	10.26	3.2	5.3
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	20:49						
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	20:49						
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.4	3	1	20:49	25.8	8.15	24.7	9.85	4.11	6.4
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.4	3	2	20:49	25.8	8.15	24.8	9.99	4.02	6.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	20:21	25.5	8.14	25.9	10.11	3.59	4.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	20:21	25.5	8.14	25.9	10.14	3.48	4.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	20:21						
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	20:21						
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR9	Bottom	2.4	3	1	20:21	24.8	8.15	26.3	8.65	4.22	5.4
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR9	Bottom	2.4	3	2	20:21	24.8	8.15	26.3	8.69	4.35	5.6
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	21:25	25.4	8.13	25.1	9.58	3.17	6.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	21:25	25.4	8.13	25.2	9.59	3.1	6.1
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.8	2	1	21:25	25.2	8.13	25.4	9.73	2.68	5.5
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR10A	Middle	5.8	2	2	21:25	25.2	8.13	25.4	9.66	2.6	5.8
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.6	3	1	21:25	24.9	8.14	25.9	8.14	2.55	6.2
TMCLKL	HY/2012/08	2015-04-27	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	10.6	3	2	21:25	24.9	8.14	25.9	8.81	2.61	6.1
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	17:18	25.4	8.06	26.1	8.34	7.13	8
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	17:18	25.3	8.04	26.2	8.32	7.15	8.3
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS4	Middle	11.6	2	1	17:18	25.2	8.13	26.3	8.06	7.24	8.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS4	Middle	11.6	2	2	17:18	25.3	8.15	26.3	8.08	7.26	8.1
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS4	Bottom	22.1	3	1	17:18	25.1	6.99	26.4	7.93	7.39	8.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS4	Bottom	22.1	3	2	17:18	25	7.01	26.5	7.95	7.41	8.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	14:33	25.5	7.92	26	8.83	6.21	7.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	14:33	25.4	7.94	26	8.81	6.23	7.1
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS6	Middle	6.5	2	1	14:33	25.4	8.11	26.1	8.7	6.48	7.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS6	Middle	6.5	2	2	14:33	25.3	8.09	26.2	8.68	6.5	7.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS6	Bottom	11.9	3	1	14:33	25.2	8.24	26.3	8.72	6.58	7.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	CS6	Bottom	11.9	3	2	14:33	25.1	8.26	26.4	8.7	6.6	7.5
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	16:47	25.5	8.13	26.1	8.26	6.93	7.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	16:47	25.6	8.11	26.2	8.28	6.95	7.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS12	Middle	6.8	2	1	16:47	25.4	7.96	26.3	7.96	7.12	8.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS12	Middle	6.8	2	2	16:47	25.3	7.98	26.3	7.94	7.14	8.5
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS12	Bottom	12.5	3	1	16:47	25.1	7.83	26.4	7.83	7.21	8.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS12	Bottom	12.5	3	2	16:47	25.2	7.85	26.5	7.8	7.23	8.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	16:27	25.5	8.12	26.1	7.81	7.12	8
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	16:27	25.4	8.14	26.2	7.83	7.1	8.3
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS13	Middle	6	2	1	16:27	25.3	8.21	26.3	7.63	7.23	8.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS13	Middle	6	2	2	16:27	25.3	8.23	26.4	7.65	7.25	8.1
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.9	3	1	16:27	25.1	7.95	26.5	7.55	7.56	8.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS13	Bottom	10.9	3	2	16:27	25.2	7.93	26.4	7.57	7.58	8.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	17:03	25.7	7.92	26	8.55	7.21	8.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	17:03	25.6	7.9	25.9	8.57	7.23	8.3
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS14	Middle	7.3	2	1	17:03	25.5	8.11	26.1	8.31	7.13	8.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS14	Middle	7.3	2	2	17:03	25.4	8.09	26.2	8.29	7.11	8.5
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS14	Bottom	13.6	3	1	17:03	25.3	8.24	26.3	8.11	6.94	7.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS14	Bottom	13.6	3	2	17:03	25.2	8.22	26.4	8.13	6.96	8.1
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	16:09	25.6	7.92	26	8.04	6.14	7.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	16:09	25.7	7.94	26	8.06	6.16	7.3
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS15	Middle	5	2	1	16:09	25.5	7.99	26.1	7.92	6.26	7.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS15	Middle	5	2	2	16:09	25.4	8.01	26.2	7.94	6.28	7.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS15	Bottom	9	3	1	16:09	25.2	8.13	26.3	7.61	7.13	8.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	IS15	Bottom	9	3	2	16:09	25.1	8.15	26.4	7.59	7.11	8.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	15:33	25.7	7.96	26.1	8.58	7.26	8.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	15:33	25.6	7.38	26.2	8.5	7.28	8.3

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	15:33						
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	15:33						
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR8	Bottom	3.6	3	1	15:33	25.5	8.03	26.3	8.42	7.33	8.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR8	Bottom	3.6	3	2	15:33	25.4	8.05	26.3	8.44	7.35	8.7
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	15:54	25.4	8.03	25.8	7.93	5.94	6.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	15:54	25.5	8.05	25.9	7.95	5.96	6.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	15:54						
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	15:54						
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR9	Bottom	3.9	3	1	15:54	25.3	8.12	26	7.66	6.13	8.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR9	Bottom	3.9	3	2	15:54	25.2	8.14	26.1	7.68	6.15	8.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	15:04	25.6	8.13	26.1	8.43	7.34	8.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	15:04	25.5	8.15	26.1	8.45	7.32	8.5
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR10A	Middle	7.6	2	1	15:04	25.4	7.94	26.2	8.36	7.41	8.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR10A	Middle	7.6	2	2	15:04	25.3	7.96	26.3	8.34	7.43	8.7
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR10A	Bottom	14.1	3	1	15:04	25.2	7.83	26.4	7.99	7.65	8.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Flood	Fine	Small Wave	SR10A	Bottom	14.1	3	2	15:04	25.1	7.85	26.5	8.01	7.67	8.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	08:54	25.6	8.06	25.3	9.19	8.1	9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	08:54	25.5	8.05	25.4	9.15	8.14	9.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS4	Middle	11.4	2	1	08:54	24.6	8.07	25.9	8.32	8.05	9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS4	Middle	11.4	2	2	08:54	24.5	8.06	26	8.36	7.98	9.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS4	Bottom	21.8	3	1	08:54	24.4	8.07	26.1	8.35	8.13	9.3
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS4	Bottom	21.8	3	2	08:54	24.5	8.08	26	8.38	8.2	9.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	12:06	24.6	8.13	25.6	8.6	5.47	6.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	12:06	24.5	8.14	25.7	8.62	5.52	6.5
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS6	Middle	6.3	2	1	12:06	24.5	8.13	26.4	7.57	4.9	5.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS6	Middle	6.3	2	2	12:06	24.6	8.15	26.5	7.61	4.95	6.1
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS6	Bottom	11.6	3	1	12:06	24.4	8.16	26.7	7.15	4.5	5.5
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	CS6	Bottom	11.6	3	2	12:06	24.3	8.17	26.6	7.19	4.53	5.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	09:42	25.1	8.05	25.7	9.4	7.12	8.3
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	09:42	25	8.06	25.8	9.36	7.07	8
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS12	Middle	6.6	2	1	09:42	24.5	8.07	26.4	8.73	6.09	7.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS12	Middle	6.6	2	2	09:42	24.6	8.08	26.5	8.7	6.15	7.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS12	Bottom	12.2	3	1	09:42	24.1	8.07	27.4	8.64	8.08	9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS12	Bottom	12.2	3	2	09:42	24	8.09	27.3	8.67	8.15	9.1
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	10:06	25.2	8.2	25.9	9.24	4.66	5.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	10:06	25.1	8.21	26	9.27	4.72	5.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.8	2	1	10:06	24.8	8.22	26.1	8.93	5.61	6.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.8	2	2	10:06	24.9	8.21	26.2	8.96	5.56	6.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.6	3	1	10:06	24.5	8.23	26.6	8.4	8.68	9.5
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.6	3	2	10:06	24.4	8.24	26.5	8.46	8.64	9.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	09:18	25	8.06	25.9	8.94	7.87	8.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	09:18	24.9	8.07	26	8.99	7.84	8.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.2	2	1	09:18	24.5	8.7	26	8.4	8	9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS14	Middle	7.2	2	2	09:18	24.6	8.06	26.1	8.45	7.96	8.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS14	Bottom	13.4	3	1	09:18	24.4	8.08	26.2	8.27	8.15	9.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS14	Bottom	13.4	3	2	09:18	24.3	8.07	26.1	8.23	8.07	9.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	10:30	25.4	8.19	26	8.66	4.3	5.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	10:30	25.3	8.18	26.1	8.68	4.37	5.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS15	Middle	4.9	2	1	10:30	24.9	8.19	26.4	8.33	4.73	5.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS15	Middle	4.9	2	2	10:30	24.8	8.2	26.3	8.32	4.78	5.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS15	Bottom	8.8	3	1	10:30	24.6	8.2	26.5	8.12	5.16	6.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	IS15	Bottom	8.8	3	2	10:30	24.5	8.21	26.6	8.16	5.08	6.1
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	11:18	25	8.18	25.8	9.32	4.68	5.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	11:18	24.9	8.19	25.9	9.29	4.63	5.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	11:18						
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	11:18						
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.2	3	1	11:18	24.8	8.19	26.3	8.79	6.39	7.4
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.2	3	2	11:18	24.7	8.2	26.2	8.75	6.45	7.1

Project	Works	Date	Tide	Weather	Sea Condition	Stat	Level	Water Depth	Lev_Cod	Replicate	Time	Temp(°C)	pH	Salinity(ppt)	DO(mg/L)	Turbidity(NTU)	SS(mg/L)
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	10:54	25.2	8.04	26.3	7.88	7.95	8.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	10:54	25.1	8.03	26.4	7.84	8	8.5
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	10:54						
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	10:54						
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR9	Bottom	3.6	3	1	10:54	24.3	8.05	26.8	7.62	6.65	7.8
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR9	Bottom	3.6	3	2	10:54	24.4	8.06	26.7	7.58	6.58	7.9
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	11:42	24.4	8.15	27.4	8.05	3.36	5
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	11:42	24.3	8.16	27.5	8.01	3.42	5.3
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR10A	Middle	7.4	2	1	11:42	24	8.17	27.5	7.2	3.41	6.2
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR10A	Middle	7.4	2	2	11:42	24.1	8.16	27.6	7.22	3.44	6.3
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	13.8	3	1	11:42	24	8.18	27.7	7.38	2.75	5.6
TMCLKL	HY/2012/08	2015-04-29	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	13.8	3	2	11:42	23.9	8.19	27.6	7.4	2.8	5.8

Appendix J

## Impact Dolphin Monitoring Survey

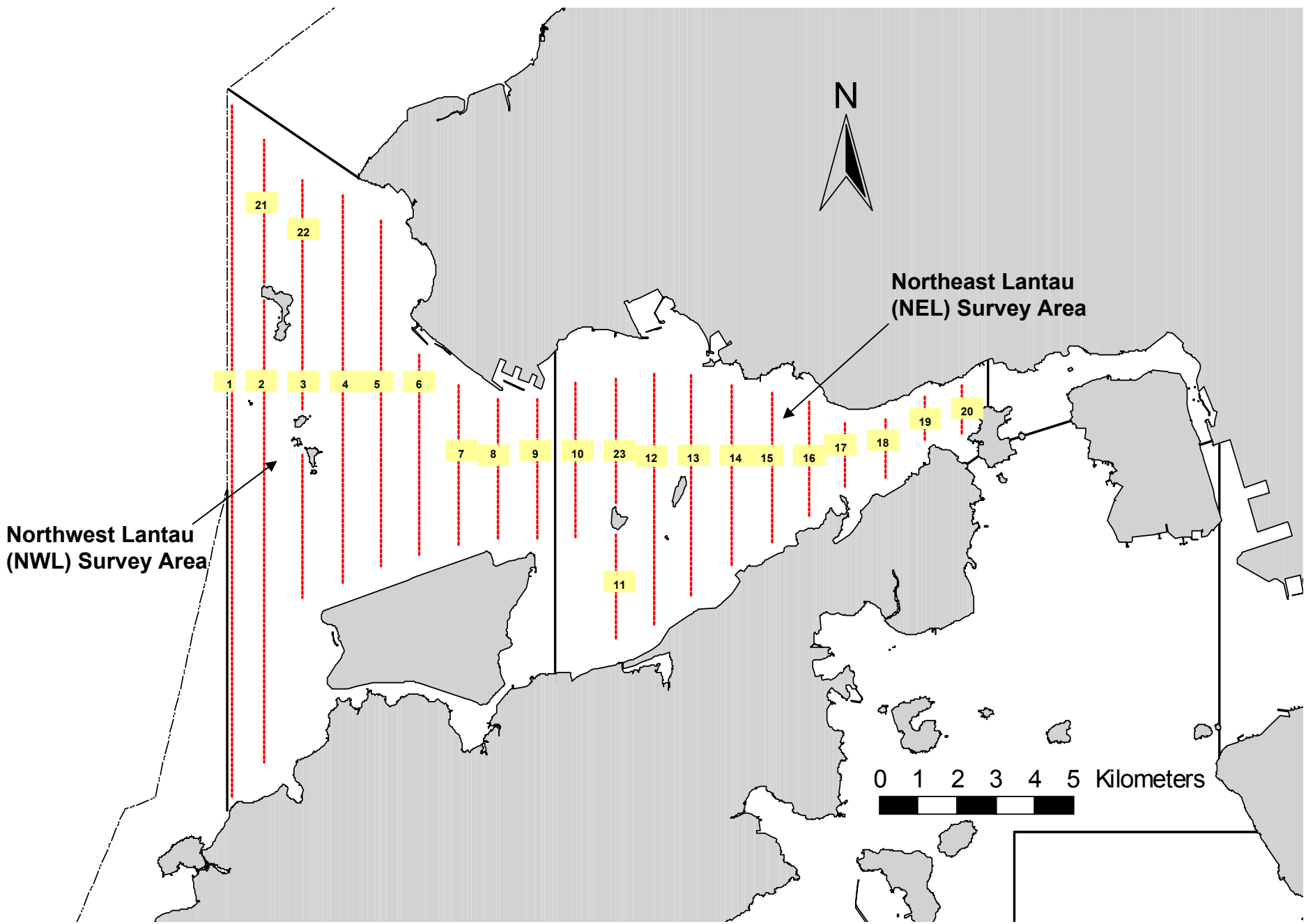


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas



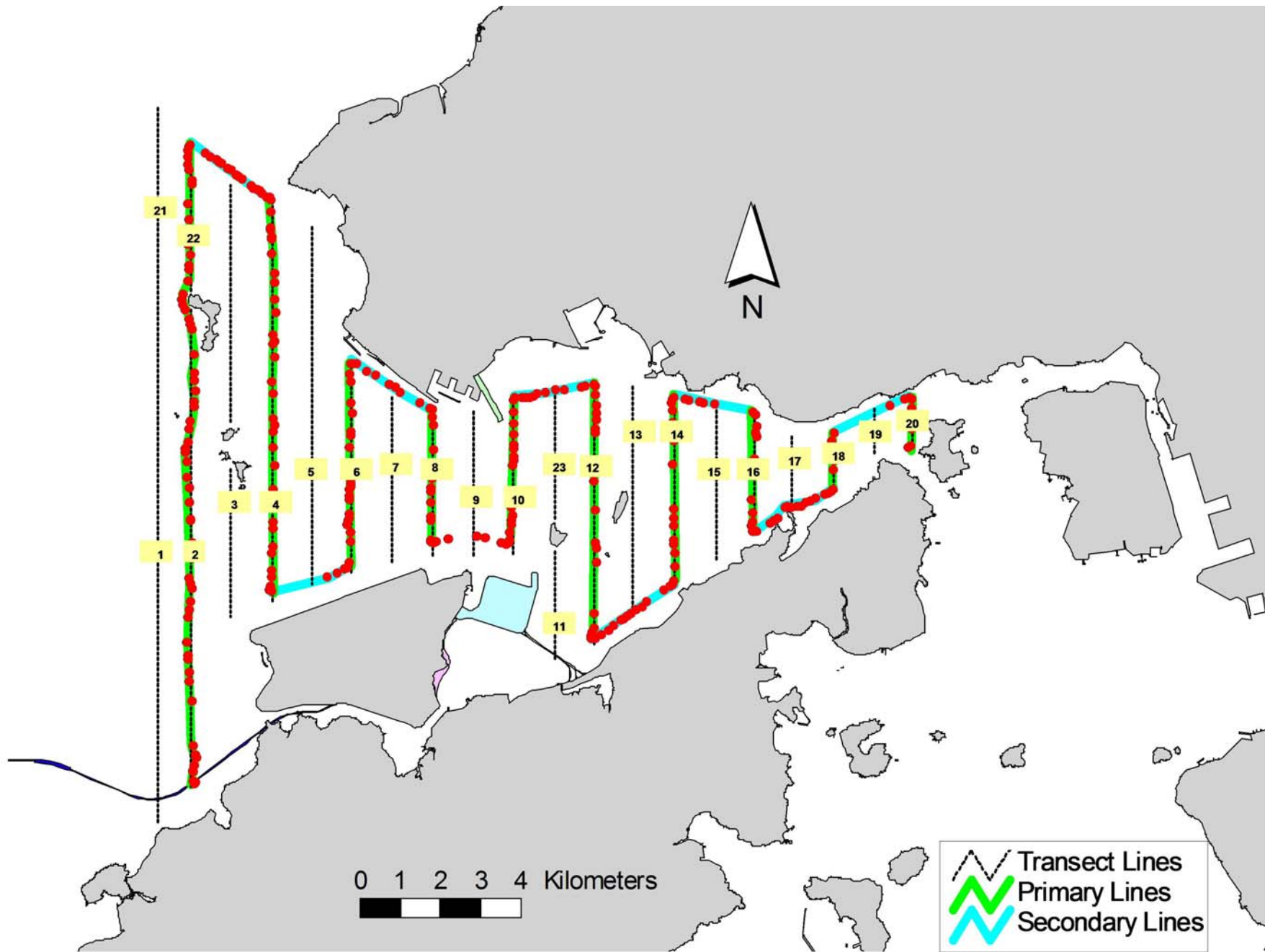


Figure 2. Survey Route on April 8<sup>th</sup>, 2015 (from HKLR03 project)

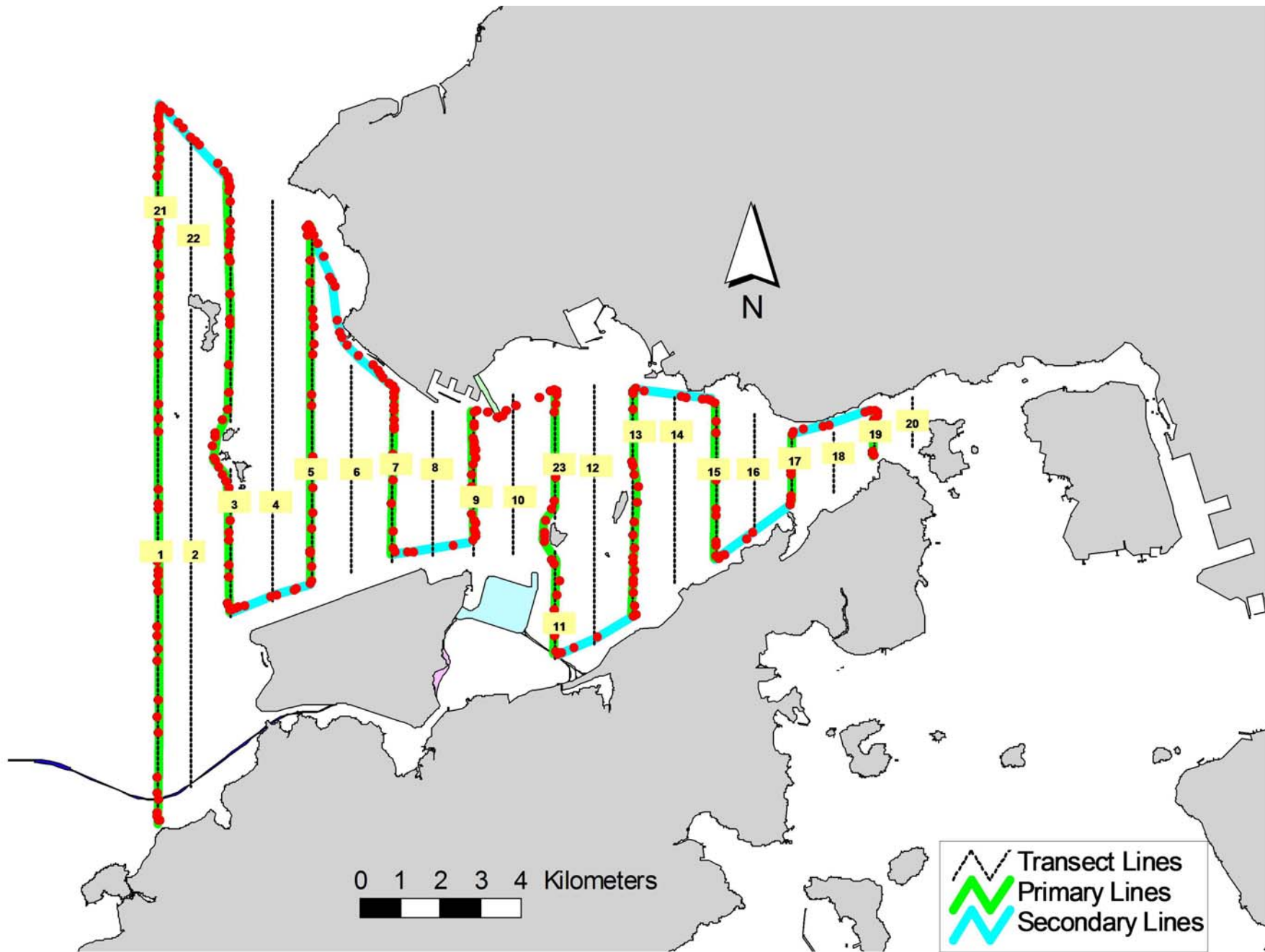


Figure 3. Survey Route on April 10<sup>th</sup>, 2015 (from HKLR03 project)

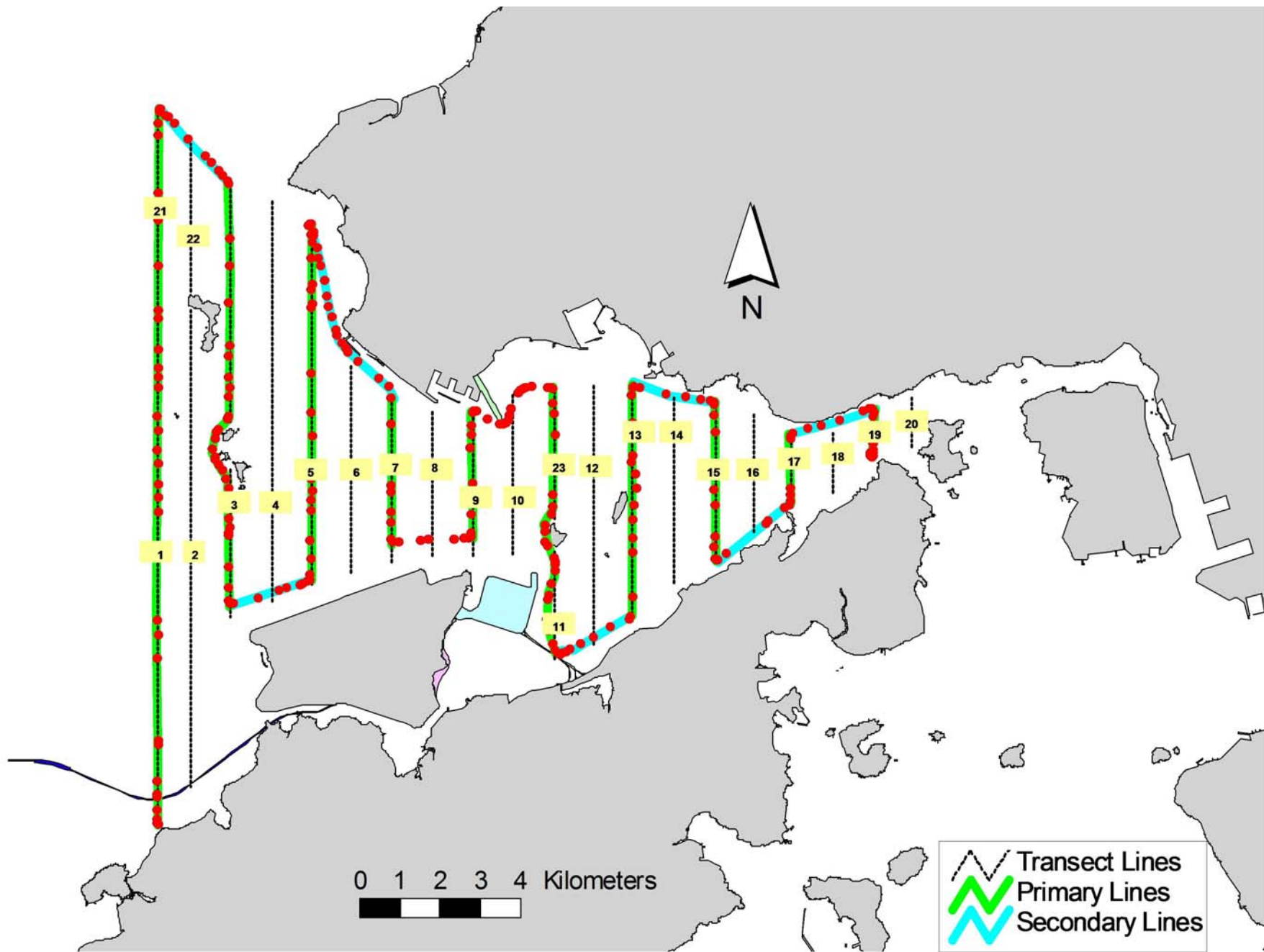


Figure 4. Survey Route on April 17<sup>th</sup>, 2015 (from HKLR03 project)

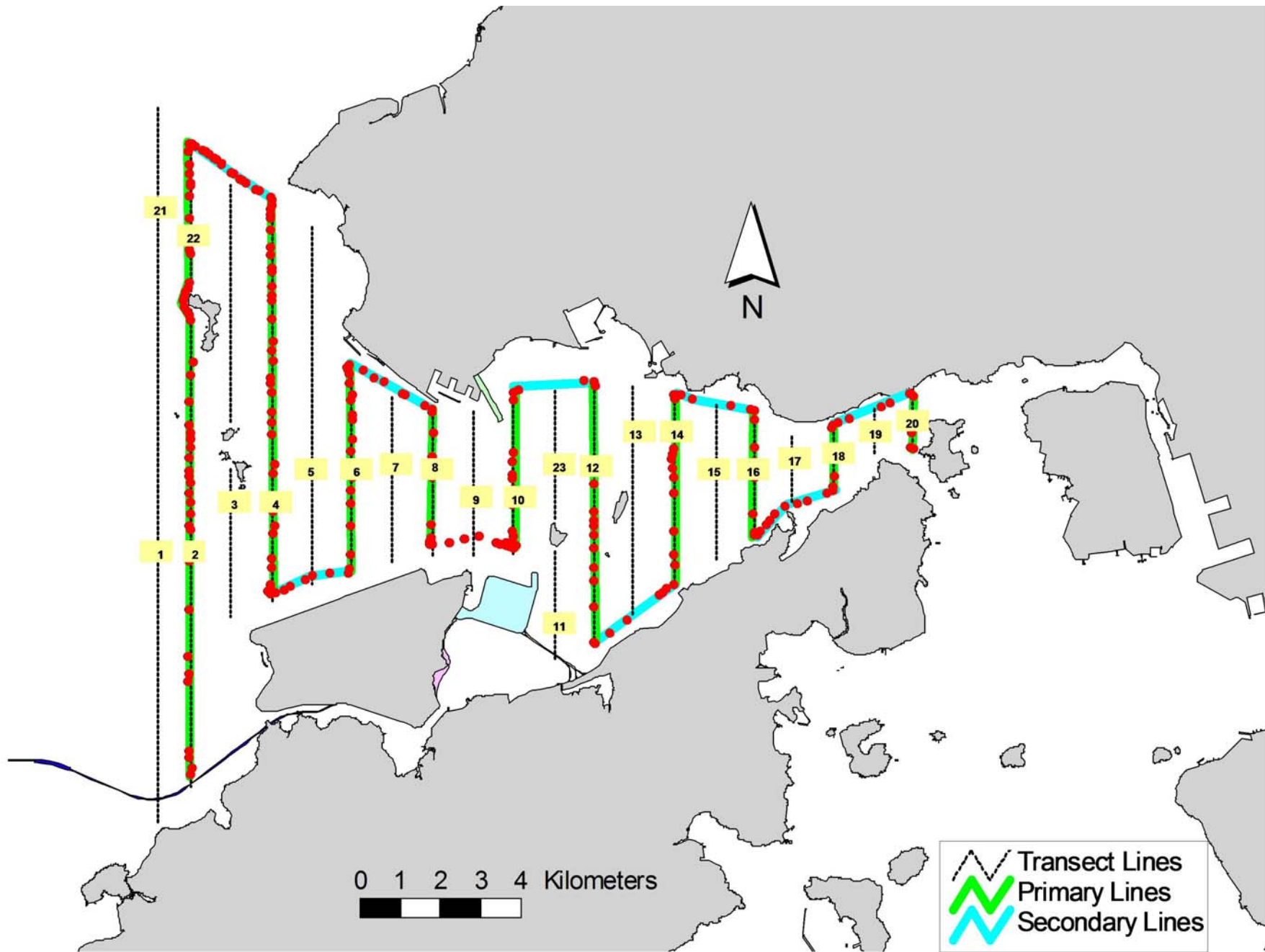


Figure 5. Survey Route on April 22<sup>nd</sup>, 2015 (from HKLR03 project)

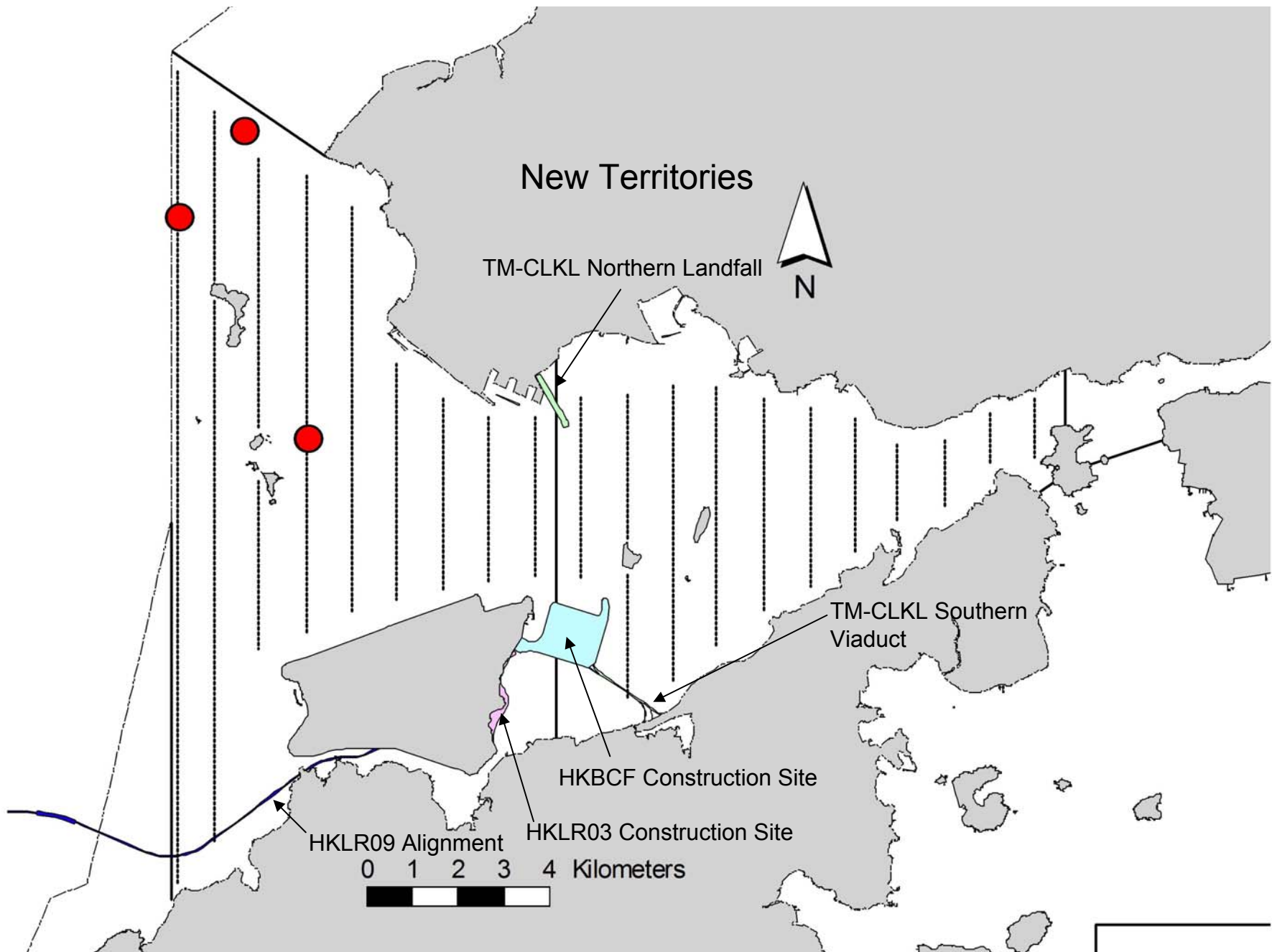


Figure 6. Distribution of Chinese White Dolphin Sightings During April 2015 HKLR03 Monitoring Surveys

## Appendix I. HKLR03 Survey Effort Database (April 2015)

(Abbreviations: BEAU = Beaufort Sea State; P = Primary Line Effort; S = Secondary Line Effort)

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
8-Apr-15	NE LANTAU	2	14.22	SPRING	STANDARD31516	HKLR	P
8-Apr-15	NE LANTAU	3	5.10	SPRING	STANDARD31516	HKLR	P
8-Apr-15	NE LANTAU	1	0.50	SPRING	STANDARD31516	HKLR	S
8-Apr-15	NE LANTAU	2	9.09	SPRING	STANDARD31516	HKLR	S
8-Apr-15	NE LANTAU	3	0.99	SPRING	STANDARD31516	HKLR	S
8-Apr-15	NW LANTAU	2	4.96	SPRING	STANDARD31516	HKLR	P
8-Apr-15	NW LANTAU	3	25.95	SPRING	STANDARD31516	HKLR	P
8-Apr-15	NW LANTAU	4	0.84	SPRING	STANDARD31516	HKLR	P
8-Apr-15	NW LANTAU	2	2.29	SPRING	STANDARD31516	HKLR	S
8-Apr-15	NW LANTAU	3	5.26	SPRING	STANDARD31516	HKLR	S
10-Apr-15	NW LANTAU	2	14.40	SPRING	STANDARD31516	HKLR	P
10-Apr-15	NW LANTAU	3	26.10	SPRING	STANDARD31516	HKLR	P
10-Apr-15	NW LANTAU	2	9.40	SPRING	STANDARD31516	HKLR	S
10-Apr-15	NW LANTAU	3	4.20	SPRING	STANDARD31516	HKLR	S
10-Apr-15	NE LANTAU	2	15.44	SPRING	STANDARD31516	HKLR	P
10-Apr-15	NE LANTAU	3	1.30	SPRING	STANDARD31516	HKLR	P
10-Apr-15	NE LANTAU	2	10.06	SPRING	STANDARD31516	HKLR	S
17-Apr-15	NW LANTAU	2	4.84	SPRING	STANDARD31516	HKLR	P
17-Apr-15	NW LANTAU	3	29.76	SPRING	STANDARD31516	HKLR	P
17-Apr-15	NW LANTAU	4	5.80	SPRING	STANDARD31516	HKLR	P
17-Apr-15	NW LANTAU	2	0.30	SPRING	STANDARD31516	HKLR	S
17-Apr-15	NW LANTAU	3	7.60	SPRING	STANDARD31516	HKLR	S
17-Apr-15	NW LANTAU	4	4.80	SPRING	STANDARD31516	HKLR	S
17-Apr-15	NE LANTAU	2	3.60	SPRING	STANDARD31516	HKLR	P
17-Apr-15	NE LANTAU	3	11.51	SPRING	STANDARD31516	HKLR	P
17-Apr-15	NE LANTAU	4	2.21	SPRING	STANDARD31516	HKLR	P
17-Apr-15	NE LANTAU	2	4.41	SPRING	STANDARD31516	HKLR	S
17-Apr-15	NE LANTAU	3	5.07	SPRING	STANDARD31516	HKLR	S
22-Apr-15	NE LANTAU	2	20.00	SPRING	STANDARD31516	HKLR	P
22-Apr-15	NE LANTAU	2	10.90	SPRING	STANDARD31516	HKLR	S
22-Apr-15	NW LANTAU	1	3.24	SPRING	STANDARD31516	HKLR	P
22-Apr-15	NW LANTAU	2	25.27	SPRING	STANDARD31516	HKLR	P
22-Apr-15	NW LANTAU	3	3.37	SPRING	STANDARD31516	HKLR	P
22-Apr-15	NW LANTAU	2	7.07	SPRING	STANDARD31516	HKLR	S
22-Apr-15	NW LANTAU	3	0.85	SPRING	STANDARD31516	HKLR	S

## Appendix II. HKLR03 Chinese White Dolphin Sighting Database (April 2015)

(Abbreviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Association; P/S: Sighting Made on Primary/Secondary Line)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
08-Apr-15	1	1309	3	NW LANTAU	3	142	ON	HKLR	823791	807532	SPRING	NONE	P
10-Apr-15	1	1103	2	NW LANTAU	2	ND	OFF	HKLR	828359	804688	SPRING	NONE	
22-Apr-15	1	1432	8	NW LANTAU	2	354	ON	HKLR	830139	806113	SPRING	NONE	S

**Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in April 2015**

<b>ID#</b>	<b>DATE</b>	<b>STG#</b>	<b>AREA</b>
NL104	22/04/15	1	NW LANTAU
NL136	08/04/15	1	NW LANTAU
NL153	22/04/15	1	NW LANTAU
NL202	22/04/15	1	NW LANTAU
NL236	22/04/15	1	NW LANTAU
NL286	22/04/15	1	NW LANTAU
NL307	22/04/15	1	NW LANTAU



NL136\_20150408\_1



NL104\_20150422\_1



NL153\_20150422\_1



NL202\_20150422\_1



NL236\_20150422\_1



NL286\_20150422\_1



NL307\_20150422\_1



Appendix IV. Photographs of Identified Individual Dolphins in April 2015 (HKLR03)

Appendix K

## Event and Action Plan

**Event and Action Plan for Impact Air Monitoring**

Action Level	Action			
	ET (a)	IEC (a)	SOR (a)	Contractor(s)
Exceedance recorded	<ol style="list-style-type: none"> <li>1. Identify the source.</li> <li>2. Repeat measurement to confirm finding. If two consecutive measurements exceed Action Level, the exceedance is then confirmed.</li> <li>3. Inform the IEC and the SOR.</li> <li>4. Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>5. If the exceedance is confirmed to be Project related after investigation, increase monitoring frequency to daily.</li> <li>6. Discuss with the IEC and the Contractor on remedial actions required.</li> <li>7. If exceedance continues, arrange meeting with the IEC and the SOR.</li> <li>8. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by the ET.</li> <li>2. Check the Contractor's working method.</li> <li>3. If the exceedance is confirmed to be Project related after investigation, discuss with the ET and the Contractor on possible remedial measures.</li> <li>4. Advise the SOR on the effectiveness of the proposed remedial measures.</li> <li>5. Supervisor implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing.</li> <li>2. Notify the Contractor.</li> <li>3. Ensure remedial measures properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Rectify any unacceptable practice</li> <li>2. Amend working methods if appropriate</li> <li>3. If the exceedance is confirmed to be Project related, submit proposals for remedial actions to IEC within 3 working days of notification</li> <li>4. Implement the agreed proposals</li> <li>5. Amend proposal if appropriate</li> </ol>

	Action			
	ET (a)	IEC (a)	SOR (a)	Contractor(s)
<b>Limit Level</b>				
Exceedance recorded	<ol style="list-style-type: none"> <li>1. Identify the source.</li> <li>2. Repeat measurement to confirm finding. If two consecutive measurements exceed Limit Level, the exceedance is then confirmed.</li> <li>3. Inform the IEC, the SOR, the DEP and the Contractor.</li> <li>4. Investigate the cause of exceedance and check Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>5. If the exceedance is confirmed to be Project related after investigation, increase monitoring frequency to daily.</li> <li>6. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>7. Arrange meeting with the IEC and the SOR to discuss the remedial actions to be taken.</li> <li>8. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results.</li> <li>9. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by the ET.</li> <li>2. Check Contractor's working method.</li> <li>3. If the exceedance is confirmed to be Project related after investigation, discuss with the ET and the Contractor on possible remedial measures.</li> <li>4. Advise the SOR on the effectiveness of the proposed remedial measures.</li> <li>5. Supervisor implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing.</li> <li>2. Notify the Contractor.</li> <li>3. If the exceedance is confirmed to be Project related after investigation, in consultation with the IEC, agree with the Contractor on the remedial measures to be implemented.</li> <li>4. Ensure remedial measures are properly implemented.</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance.</li> <li>2. If the exceedance is confirmed to be Project related after investigation, submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>3. Implement the agreed proposals.</li> <li>4. Amend proposal if appropriate.</li> <li>5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated.</li> </ol>

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

*Event & Action Plan for Water Quality*

Event	ET Leader	IEC	SOR	Contractor
Action level being exceeded by one sampling day	<ol style="list-style-type: none"> <li>Repeat <i>in situ</i> measurement on next day of exceedance to confirm findings;</li> <li>Identify source(s) of impact;</li> <li>Inform IEC, contractor and SOR;</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods.</li> </ol>	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET and Contractor's working methods.</li> </ol>	<ol style="list-style-type: none"> <li>Confirm receipt of notification of non-compliance in writing;</li> <li>Notify Contractor.</li> </ol>	<ol style="list-style-type: none"> <li>Inform the SOR and confirm notification of the non-compliance in writing;</li> <li>Rectify unacceptable practice;</li> <li>Amend working methods if appropriate.</li> </ol>
Action level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> <li>Repeat measurement on next day of exceedance to confirm findings;</li> <li>Identify source(s) of impact;</li> <li>Inform IEC, contractor, SOR and EPD;</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>Discuss mitigation measures with IEC, SOR and Contractor;</li> <li>Ensure mitigation measures are implemented;</li> <li>Increase the monitoring frequency to daily until no exceedance of Action level;</li> </ol>	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET and Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial actions;</li> <li>Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly;</li> <li>Supervise the implementation of mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>Discuss with IEC on the proposed mitigation measures;</li> <li>Ensure mitigation measures are properly implemented;</li> <li>Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>Inform the Supervising Officer and confirm notification of the non-compliance in writing;</li> <li>Rectify unacceptable practice;</li> <li>Check all plant and equipment and consider changes of working methods;</li> <li>Submit proposal of additional mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR;</li> <li>Implement the agreed mitigation measures.</li> </ol>
Limit level being exceeded by one sampling day	<ol style="list-style-type: none"> <li>Repeat measurement on next day of exceedance to confirm findings;</li> </ol>	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET and</li> </ol>	<ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in</li> </ol>	<ol style="list-style-type: none"> <li>Inform the SOR and confirm notification of the</li> </ol>

Event	ET Leader	IEC	SOR	Contractor
	<ol style="list-style-type: none"> <li>2. Identify source(s) of impact;</li> <li>3. Inform IEC, contractor, SOR and EPD;</li> <li>4. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>5. Discuss mitigation measures with IEC, SOR and Contractor;</li> <li>6.</li> </ol>	<ol style="list-style-type: none"> <li>1. Contractor's working method;</li> <li>2. Discuss with ET and Contractor on possible remedial actions;</li> <li>3. Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly.</li> </ol>	<ol style="list-style-type: none"> <li>1. writing;</li> <li>2. Discuss with IEC, ET and Contractor on the proposed mitigation measures;</li> <li>3. Request Contractor to review the working methods.</li> </ol>	<ol style="list-style-type: none"> <li>1. non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment and consider changes of working methods;</li> <li>4. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR.</li> </ol>
Limit level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> <li>1. Repeat measurement on next day of exceedance to confirm findings;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform IEC, contractor, SOR and EPD;</li> <li>4. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>5. Discuss mitigation measures with IEC, SOR and Contractor;</li> <li>6. Ensure mitigation measures are implemented;</li> <li>7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days;</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor's working method;</li> <li>2. Discuss with ET and Contractor on possible remedial actions;</li> <li>3. Review the Contractor's mitigation measures whenever necessary to assure their effectiveness and advise the SOR accordingly;</li> <li>4. Supervise the implementation of mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with IEC, ET and Contractor on the proposed mitigation measures;</li> <li>2. Request Contractor to critically review the working methods;</li> <li>3. Make agreement on the mitigation measures to be implemented;</li> <li>4. Ensure mitigation measures are properly implemented;</li> <li>5. 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.</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR;</li> <li>3. Implement the agreed mitigation measures;</li> <li>4. Resubmit proposals of mitigation measures if problem still not under control;</li> <li>5. 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.</li> </ol>

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	<ol style="list-style-type: none"> <li>1. Repeat statistical data analysis to confirm findings;</li> <li>2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;</li> <li>3. Identify source(s) of impact;</li> <li>4. Inform the IEC, SOR and Contractor;</li> <li>5. Check monitoring data.</li> <li>6. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor;</li> <li>2. Discuss monitoring results and finding with the ET and the Contractor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss monitoring with the IEC and any other measures proposed by the ET;</li> <li>2. If SOR is satisfied with the proposal of any other measures, SOR to signify the agreement in writing on the measures to be implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the SOR and confirm notification of the non-compliance in writing;</li> <li>2. Discuss with the ET and the IEC and propose measures to the IEC and the SOR;</li> <li>3. Implement the agreed measures.</li> </ol>
Limit Level	<ol style="list-style-type: none"> <li>1. Repeat statistical data analysis to confirm findings;</li> <li>2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&amp;A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences;</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by ET and Contractor;</li> <li>2. Discuss monitoring results and findings with the ET and the Contractor;</li> <li>3. Attend the meeting to discuss with ET, SOR and</li> </ol>	<ol style="list-style-type: none"> <li>1. Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures.</li> <li>2. If SOR is satisfied with the</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the SOR and confirm notification of the non-compliance in writing;</li> <li>2. Attend the meeting to discuss with ET, IEC and SOR the necessity of additional dolphin monitoring and any other</li> </ol>

EVENT	ACTION*			
	ET	IEC	SOR	Contractor
	3. Identify source(s) of impact; 4. Inform the IEC, SOR and Contractor of findings; 5. Check monitoring data; 6. Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. 7. 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 additional dolphin monitoring and/or any other mitigation measures when necessary. 4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.



Appendix L

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

**Table L1** *Cumulative Statistics on Exceedances*

Parameters	Level of Exceedance	Total No. recorded in this reporting month	Total No. recorded since project commencement
1-hr TSP	Action	0	30
	Limit	0	2
24-hr TSP	Action	0	5
	Limit	0	1
Water Quality	Action	0	6
	Limit	0	1
Impact Dolphin Monitoring	Action	0	7
	Limit	0	1

**Table L2** *Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions*

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (April 2015)	0	0	0
Total No. received since project commencement	4	0	0

Appendix M

## 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 April 2015 [to be submitted not later than the 15<sup>th</sup> day of each month following reporting month] (All quantities shall be rounded off to 3 decimal places.)

Month	Monthly Break-down of <u>Inert</u> Construction & Demolition Materials (i.e. Public Fill Materials)				
	(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	64.216	0.000	0.000	0.000	64.216
Jan-2015	30.877	0.000	0.000	0.000	30.877
Feb-2015	4.152	0.000	0.000	0.000	4.152
Mar-2015	21.585	0.000	0.000	0.000	21.585
Apr-2015	15.553	0.000	0.000	0.000	15.553
May-2015					
Jun-2015					
Half Year Sub-total					
Jul-2015					
Aug-2015					
Sep-2015					
Oct-2015					
Nov-2015					
Dec-2015					
Project Total Quantities	136.383	0.000	0.000	0.000	136.383

Month	Actual Quantities of <u>Non-inert</u> Construction Waste Generated Monthly								
	Metals		Paper/ cardboard packaging		Plastics (see Note 3)		Chemical Waste		Others, e.g. General Refuse disposed at Landfill
	(in '000kg)		(in '000kg)		(in '000kg)		(in '000kg)		(in '000ton)
	generated	recycled	generated	recycled	generated	recycled	generated	Disposed	generated
Sub-total	0.000	0.000	1.050	1.050	0.000	0.000	0.110	0.110	0.605
Jan-2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.080
Feb-2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.074
Mar-2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.115
Apr-2015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.091
May-2015									
Jun-2015									
Half Year Sub-total									
Jul-2015									
Aug-2015									
Sep-2015									
Oct-2015									
Nov-2015									
Dec-2015									
Project Total Quantities	0.000	0.000	1.050	1.050	0.000	0.000	0.110	0.110	0.965

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	Imported Fill	Marine Disposal (Cat. L)	Marine Disposal (Cat. M)
(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 m <sup>3</sup> )	(in '000 m <sup>3</sup> )
5.000	0.000	0.000	0.000	5.000	180.000	5.000	40.000

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 '000m <sup>3</sup> )
0.000	0.050	0.000	0.000	0.100

- 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.
  - (4) 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 m<sup>3</sup>. (**ER Part 8 Clause 8.8.5 (d) (ii)** refers).