

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

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

08 December 2014

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Contract No. HY/2012/08





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Thirteenth Monthly Environmental Monitoring & Audit (EM&A) Report

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Summary: This document presents the Thirteenth Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section.		Date: 08 December 2014			
		Approved by: 			
		Mr Craig Reid Partner			
		Certified by: 			
		Mr Jovy Tam ET Leader			
	13 th Monthly EM&A Report	VAR	JT	CAR	08/12/14
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.: HYDZHMBEEM00_0_2530L.14

12 December 2014

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: Messers 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 November 2014 (EP-354/2009/B)**

Reference is made to the Monthly Environmental Monitoring & Audit (EM&A) Report (for November 2014) certified by the ET Leader (ET's ref.: "0212330_13th Monthly EM&A_20141201doc" dated 8 December 2014) provided to us via e-mail on 10 December 2014.

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 RP-354/2009/B.

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)

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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). Another application for variation of environmental permit (VEP) (*EP-354/2009/B*) was granted on 28 January 2014.

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 Thirteenth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 30 November 2014 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:

Marine-based Works

- Reclamation filling at Portion N-C;
- Construction of Vertical Seawall and Sloping Seawall at Portion N-C; and
- Marine Sheet Piling for Box Culvert extension at Portion N-A.

Land-based Works

- Excavation for North Launching Shaft – Reclamation Works Area – Portion N-A
- Land Bored Piling Works at Reclamation Works Area - Portion N-A;
- Surcharge set up at Reclamation Works Area – Portion N-C;
- Construction of temporary access at Reclamation Works Area – Portion N-A; and,
- Diaphragm Wall Construction at Reclamation Works Area – Portion N-A.

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	12 sessions
Impact Dolphin Monitoring	2 sessions
Joint Environmental Site Inspection	4 sessions

Implementation of Marine Mammal Exclusion Zone

Daily marine mammal exclusion zone was in effect during the period of dredging, reclamation or marine sheet piling works in open waters under this Contract. Passive Acoustic Monitoring (PAM) was also implemented for the detection of marine mammal when dredging, reclamation or marine sheet piling works were carried out outside the daylight hours under this Contract. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in November 2014 during the exclusion zone monitoring.

On 10 November 2014, night time marine works was completed. On 20 November 2014, seawall (+2.5mPD) at Northern Landfall has been fully enclosed and marine sheet pile has also been completed. There would be no dredging, reclamation or marine sheet piling works in open waters at this stage. Thus, PAM and the day-time monitoring of Dolphin Exclusion Zone (DEZ) by dolphin observers were discontinued from 10 November 2014 and 20 November 2014 respectively.

Post Translocation Coral Monitoring

The First to Fourth Quarterly Post-Translocation Coral Monitoring has been completed and the results were detailed in the *First to Fourth Quarterly Post-Translocation Coral Monitoring Report*.

Summary of Breaches of Action/Limit Levels

Breaches of Action and Limit Levels for Air Quality

Two Action Level exceedances for 1-hr TSP were recorded from the air quality monitoring in this reporting period. No Limit Level exceedances for 1-hr TSP were recorded. No Action or Limit Level exceedances for 24-hr TSP were record. The exceedances were considered to be due to the sporadic events from cumulative anthropogenic activities in this area of Hong Kong upon further investigation.

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.

Dolphin Monitoring

Whilst two Action Level exceedances and no Limit Level exceedances were observed for the quarterly dolphin monitoring data between September and November 2014, 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. Due to monthly variation in dolphin occurrence within the study area, it would be more appropriate to draw conclusion on whether any unacceptable impacts on dolphins have been detected related to the construction activities of the TM-CLKL Northern Connection Sub-sea Section 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.

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.

Two potential environmental complaint cases regarding to the dust emission by works area nearby the River Trade Terminal was referred by EPD on 12 November 2014. The interim report was submitted to EPD on 21 November 2014. The investigation findings showed that the cases were considered not related to the works under this Contract and is thus invalid.

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 December 2014 include the following:

Land-based Works

- Land Bored Piling Works at Reclamation Works Area - Portion N-A;
- Construction of temporary access at Reclamation Works Area - Portion N-A;
- Surcharge set up at Reclamation Works Area - Portion N-C;
- Box Culvert Foundation at Reclamation Works Area - Portion N-A;
- Bored Piling Works at Works Area - N6;

- Diaphragm Wall Construction at Reclamation Works Area - Portion N-A; and,
- Excavation for North Launching Shaft at Reclamation Works Area - Portion N-A.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of December 2014 are expected to be mainly associated with dust, marine water quality, marine ecology and waste management.

1.1

BACKGROUND

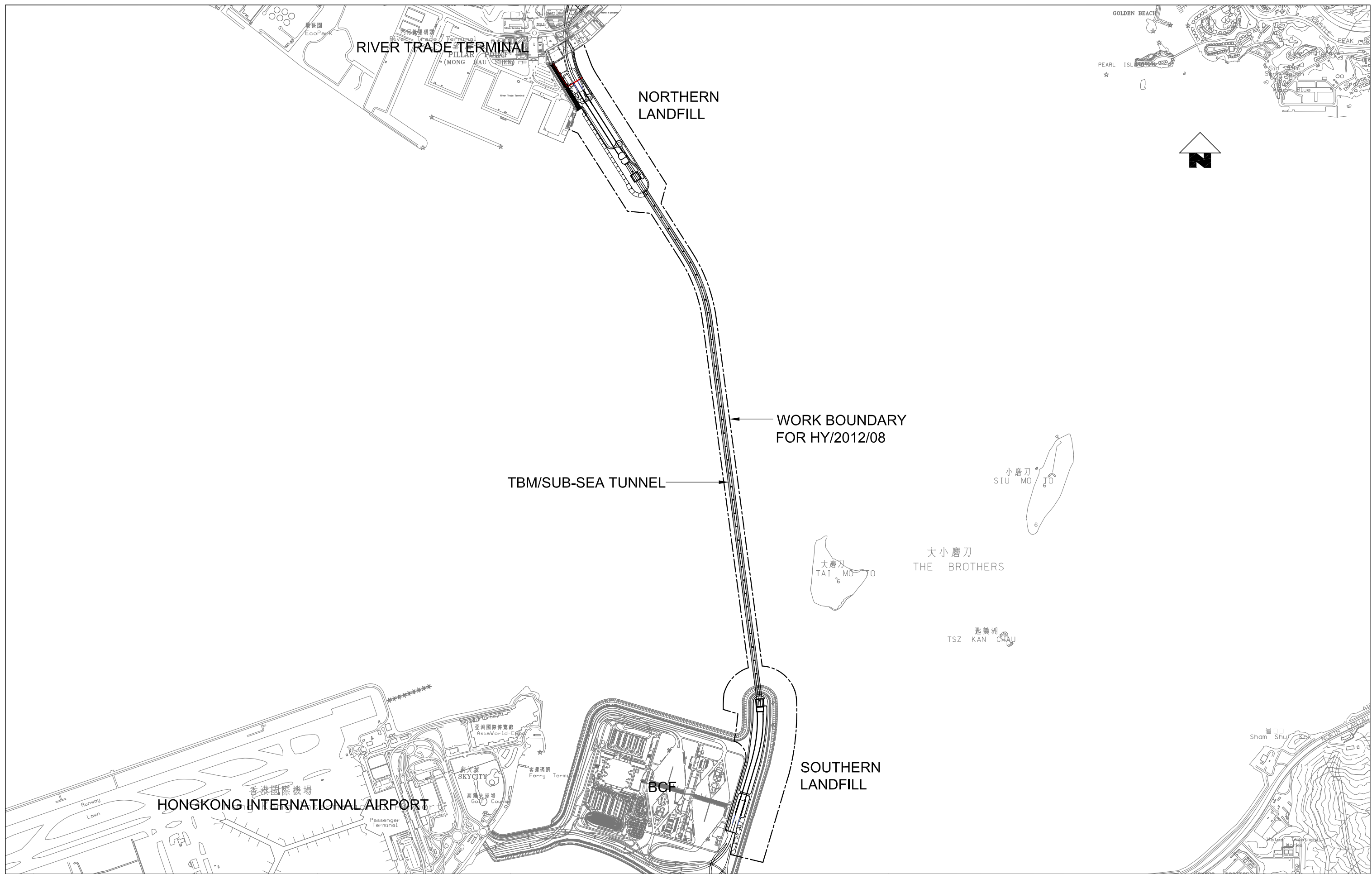
According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated 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. Another application for VEP (EP-354/2009/B) was granted on 28 January 2014.

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

Main Contractor

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Client

HIGHWAYS DEPARTMENT

Contractor's Designer

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 Thirteenth 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 November 2014.

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*.

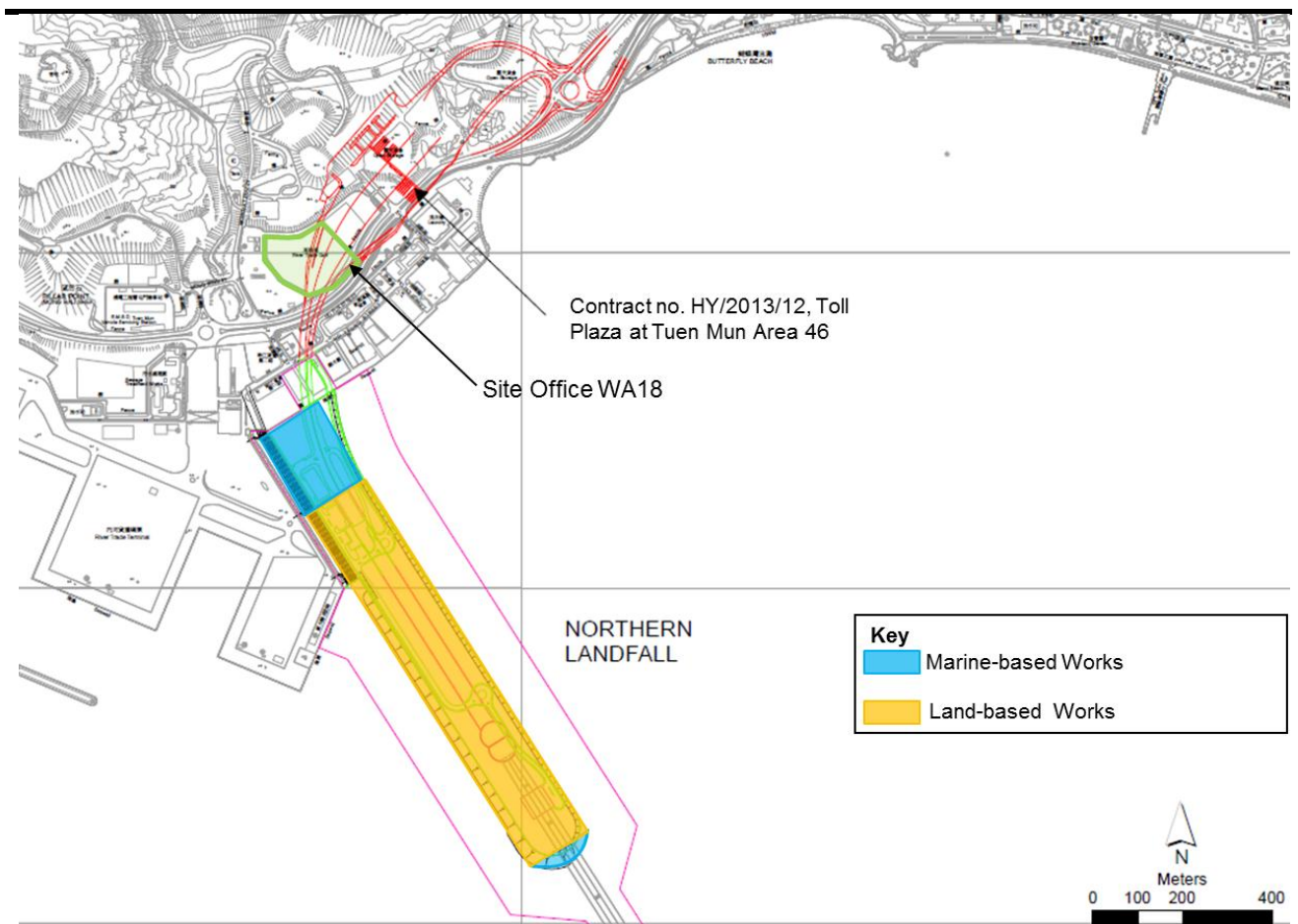
The general layout plan of the site showing the detailed works areas is shown in *Figure 1.2*. The Environmental Sensitive Receivers in the vicinity of the Project are shown in *Figure 1.3*.

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>Marine-based Works</i>
<ul style="list-style-type: none"> • Reclamation filling at Portion N-C; • Construction of Vertical Seawall and Sloping Seawall at Portion N-C; and • Marine Sheet Piling for Box Culvert extension at Portion N-A;
<i>Land-based Works</i>
<ul style="list-style-type: none"> • Excavation for North Launching Shaft at Portion N-A; • Land Bored Piling Works at Reclamation Works Area - Portion N-A; • Surcharge set up at Reclamation Works Area - Portion N-C; • Construction of temporary access at Reclamation Works Area - Portion N-A; and, • Diaphragm Wall Construction at Reclamation Works Area - Portion N-A.

Figure 1.2 *Locations of Construction Activities -November 2014*



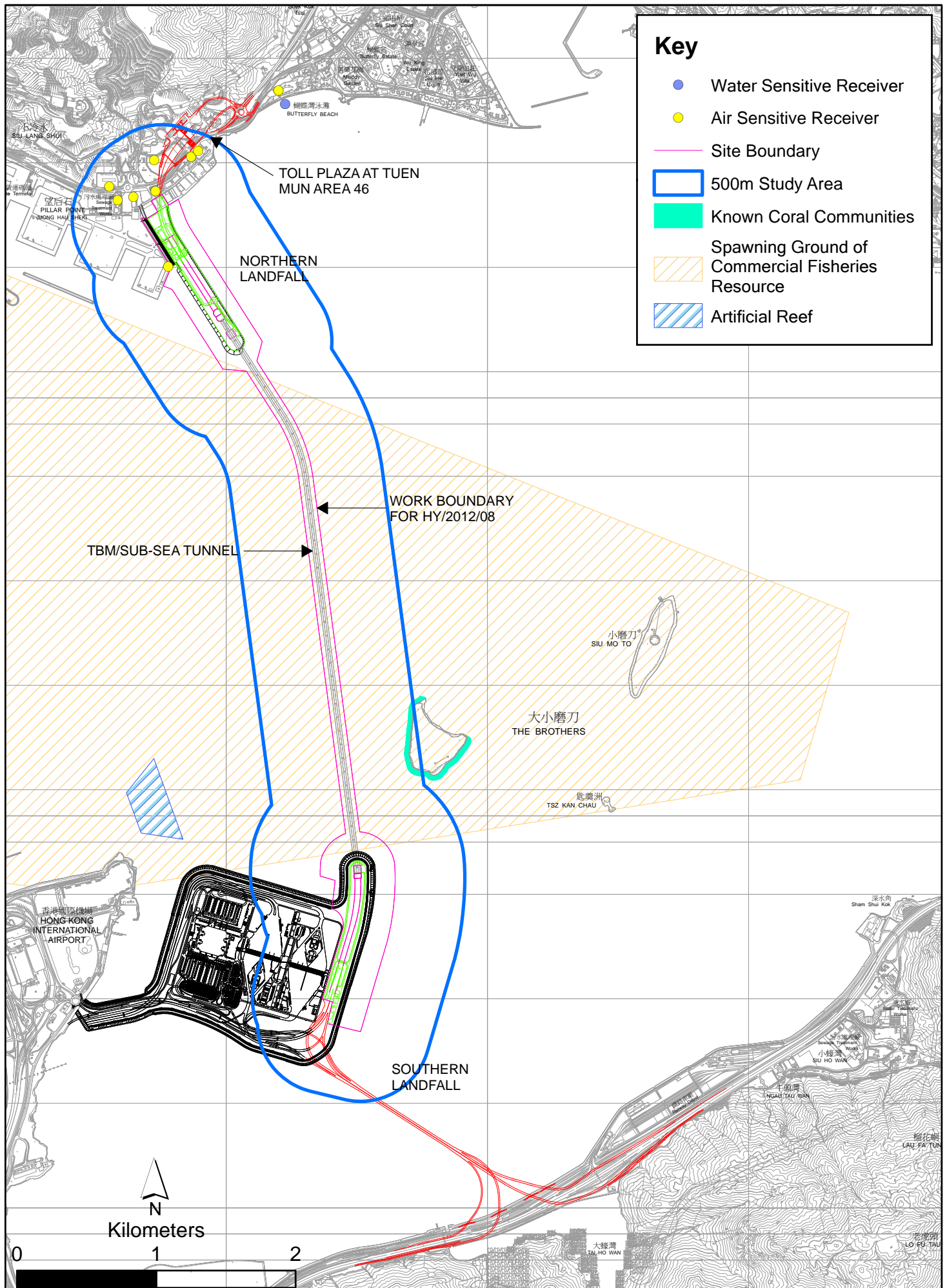


Figure 1.3 Environmental Sensitive Receivers in the vicinity of Contract No. HY/2012/08 Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-Sea Tunnel Section

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 2, 5, 8, 11, 14, 17, 20, 23, 26 and 29 November 2014 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	2, 5, 8, 11, 14, 17, 20, 23, 26 and 29 November 2014	Tuen Mun Fireboat Station	Office	TSP monitoring
ASR5		Pillar Point Fire Station	Office	<ul style="list-style-type: none"> 1-hour Total Suspended Particulates (1-hour TSP, $\mu\text{g}/\text{m}^3$), 3 times in every 6 days 24-hour Total Suspended Particulates (24-hour TSP, $\mu\text{g}/\text{m}^3$), daily for 24-hour in every 6 days
AQMS1		Previous River Trade Golf	Bare ground	Enhanced TSP monitoring (commenced on 24 October 2014)
ASR6		Butterfly Beach Laundry	Office	<ul style="list-style-type: none"> 1-hour Total Suspended Particulates (1-hour TSP, $\mu\text{g}/\text{m}^3$), 3 times in every 3 days 24-hour Total Suspended Particulates (24-hour TSP, $\mu\text{g}/\text{m}^3$), daily for 24-hour in every 3 days
ASR10		Butterfly Beach Park	Recreational uses	<ul style="list-style-type: none"> 1-hour Total Suspended Particulates (1-hour TSP, $\mu\text{g}/\text{m}^3$), 3 times in every 3 days 24-hour Total Suspended Particulates (24-hour TSP, $\mu\text{g}/\text{m}^3$), daily for 24-hour in every 3 days

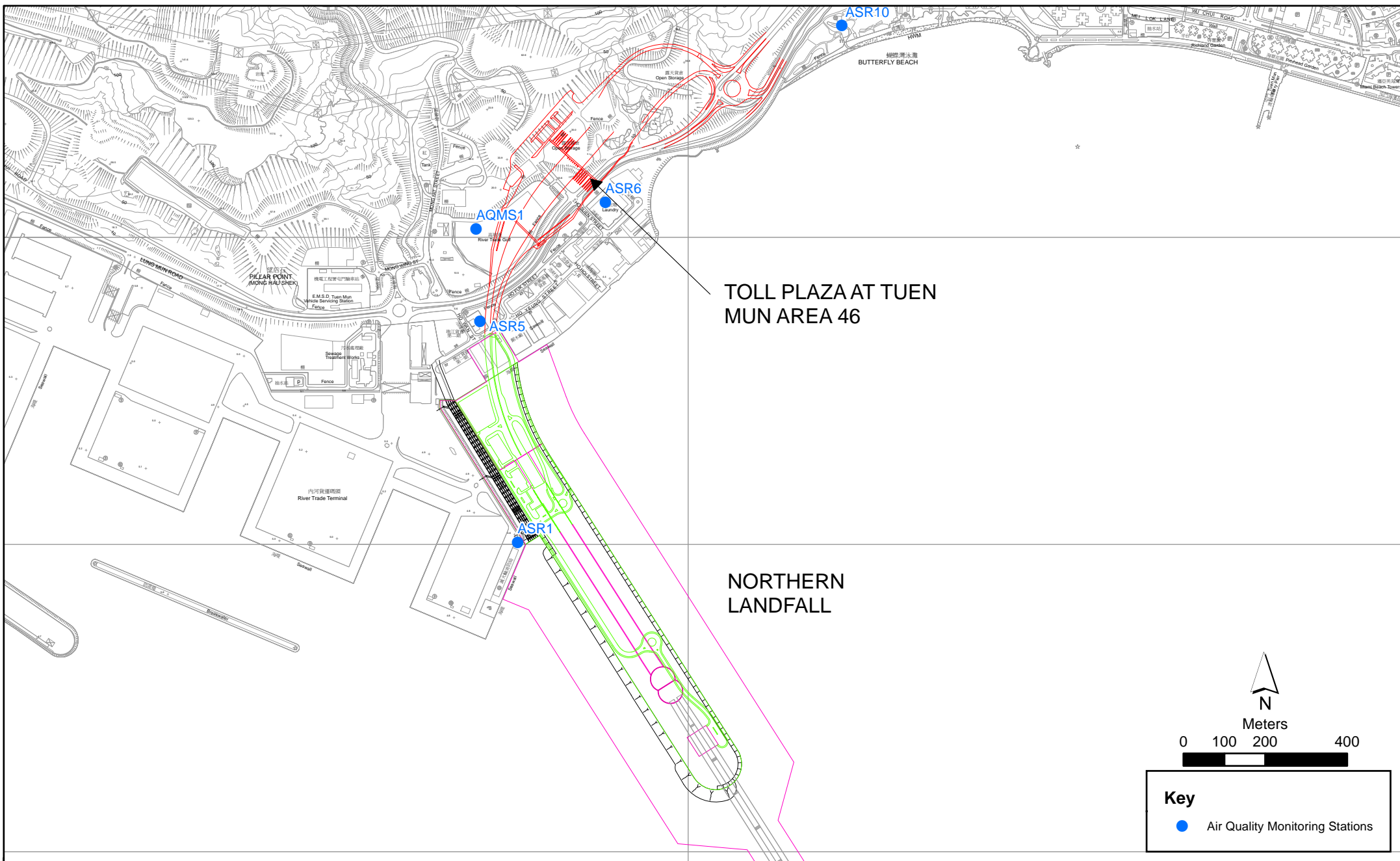


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring

Table 2.2 *Air Quality Monitoring Equipment*

Equipment	Brand and Model
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 November 2014 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*

Station	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
ASR1	196	87 - 404	331	500
ASR5	180	89 - 324	340	500
AQMS1	154	83 - 240	335	500
ASR6	145	63 - 243	338	500
ASR10	108	60 - 206	337	500

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

Station	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
ASR1	91	69 - 117	213	260
ASR5	94	74 - 110	238	260
AQMS1	91	72 - 112	213	260
ASR6	79	60 - 97	238	260
ASR10	72	60 - 92	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 two Action Level exceedances of 1-hr TSP were recorded in this reporting month. No Limit

Level exceedances for 1-hr TSP were recorded. No Action or Limit Level exceedances for 24-hr TSP were recorded.

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	<ul style="list-style-type: none"> • Temperature(°C) • pH(pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • DO (mg/L and % of saturation) • SS (mg/L) 	3 water depths: 1m below sea surface, mid-depth and 1m above sea bed. If the water depth is less than 3m, mid-depth sampling only. If water depth less than 6m, mid-depth may be omitted.	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			
IS14	Impact Station	812592	824172			
IS15	Impact Station	813356	825008			
CS4	Control / Far Field Station	810025	824004			
CS6	Control / Far Field Station	817028	823992			
SR8	Sensitive receiver (Gazettal beaches in Tuen Mun)	816306	825715			
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*.

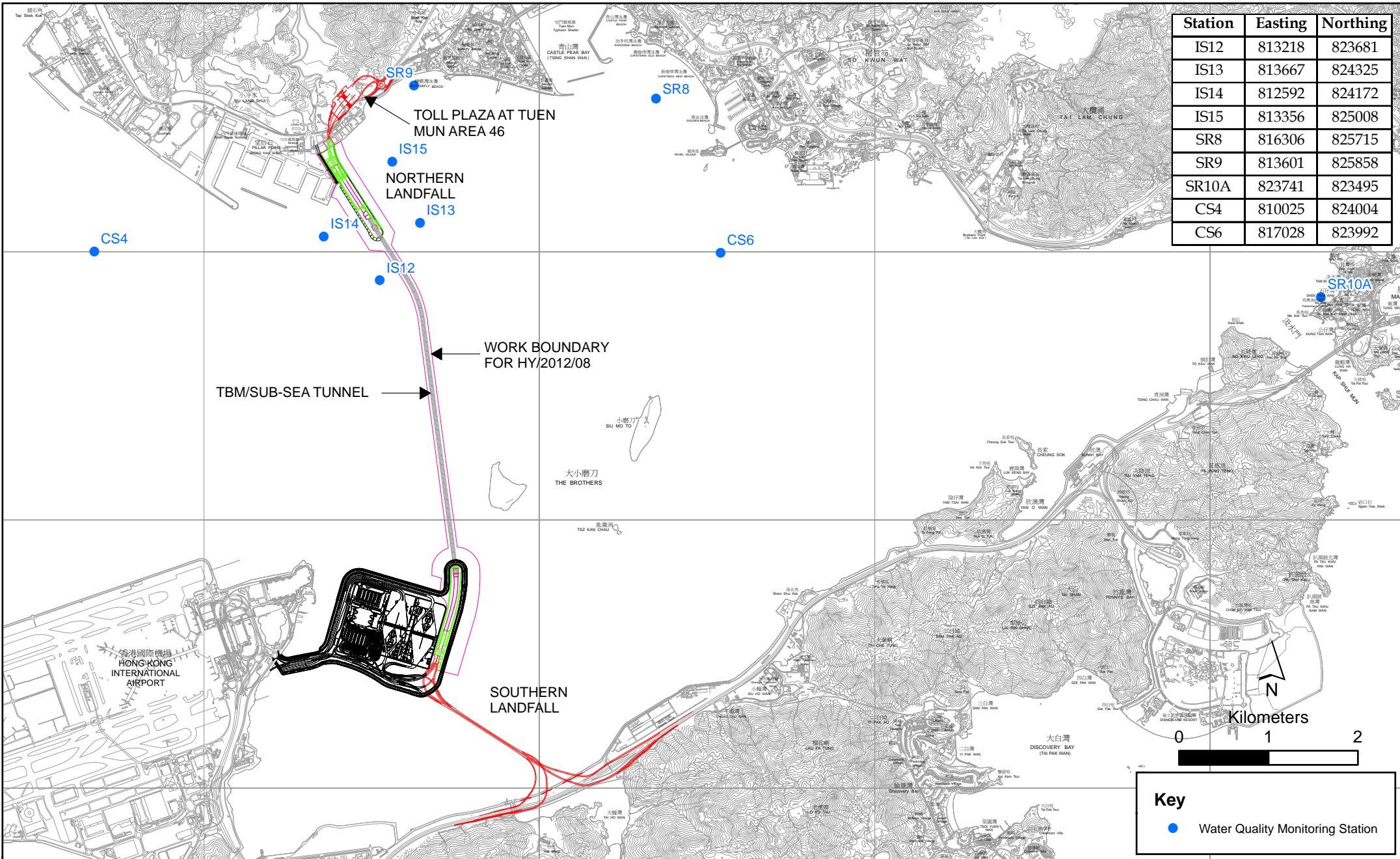


Figure 2.2

Water Quality Monitoring Station

Key

- Water Quality Monitoring Station

Table 2.6 Water Quality Monitoring Equipment

Equipment	Model
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	“Magellan” Handheld GPS Model explorer GC
Equipment	DGPS Kodan KGP913MK2 ⁽¹⁾

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 November 2014 is provided in *Appendix F*.

2.2.4 Results and Observations

During this reporting period, major marine works included reclamation filling at Portion N-C. Reclamation filling was undertaken between the 200 m of leading seawalls using filling materials specified in the EP and the approved EIA Report with a single layer silt curtain being deployed as a precautionary measure to reduce dispersion of suspended solids. It is useful to note that heavy marine traffic (not associated with the Project) was commonly observed nearby the Project site and its vicinity. On 20 November 2014, seawall (+2.5mPD) at Northern Landfall has been fully enclosed and marine sheet pile has also been completed. There will be no dredging, reclamation or marine sheet piling works in open waters at this stage.

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 twelve 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*

Equipment	Model
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.

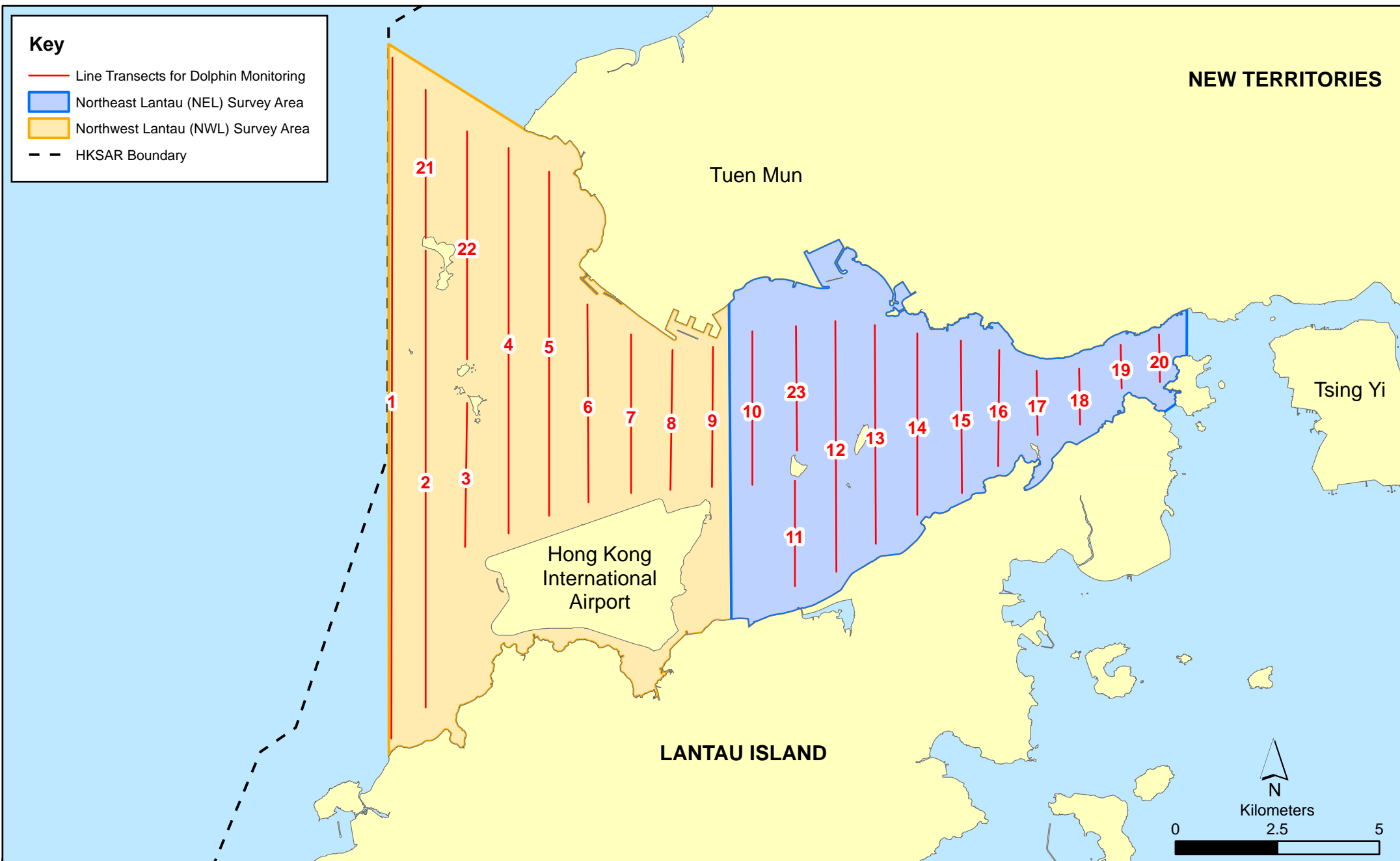


Figure 2.3

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 4, 10, 12 and 18 November 2014. The dolphin monitoring schedule for the reporting month is shown in *Appendix F*.

2.3.7 *Results & Observations*

A total of 296.14 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 November 2014. Amongst the two areas, 112.81 km and 183.33 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 217.82 km and 78.32 km, respectively. The survey efforts are summarized in *Appendix J*.

A total of 6 groups of 29 Chinese White Dolphin sightings were recorded during the two sets of surveys in November 2014. All sighting were made in NWL during the two sets of surveys in November 2014, while no dolphin was sighted in NEL. All except one sighting was made on primary lines during on-effort search, and none of the dolphin groups was 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 November 2014 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: November 4 th /10 th	0.0	0.0
	Set 2: November 12 th /18 th	0.0	0.0
NWL	Set 1: November 4 th /10 th	4.6	24.5
	Set 2: November 12 th /18 th	2.8	8.5

Note: Dolphin Encounter Rates are deduced from the Two Sets of Surveys (Two Surveys in Each Set) in November 2014 in Northeast (NEL) and Northwest Lantau (NWL)

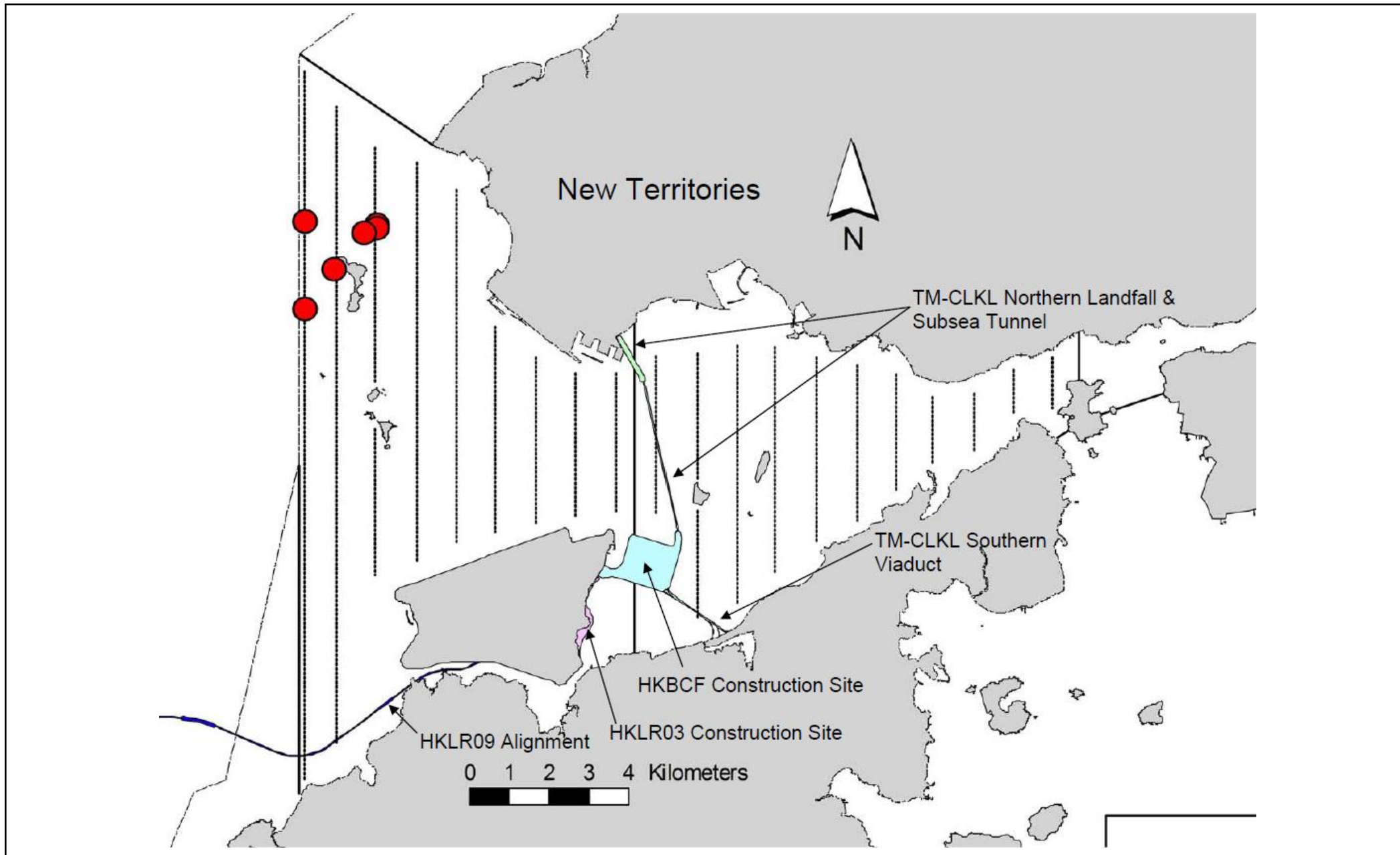


Figure 2.4

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 November 2014)

Environmental
 Resources
 Management



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
Northeast Lantau	0.0	0.0	0.0	0.0
Northwest Lantau	3.7	2.9	16.2	12.8

Note: Overall dolphin encounter rates (sightings per 100 km of survey effort) from all four surveys are conducted in November 2014 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 November 2014 was 4.8 individuals per group. Four of the 6 dolphin groups were composed of 1-4 animals, while two larger dolphin groups with 7 and 13 animals were sighted.

Whilst two Action Level exceedances (one Action Level exceedance for Northeast Lantau social cluster; one Action Level exceedance for Northwest Lantau social cluster) and no Limit Level exceedances were observed for the quarterly dolphin monitoring data between September and November 2014, 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.

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 related 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

Daily marine mammal exclusion zone was in effect during the period of dredging, reclamation or marine sheet piling works in open waters under this Contract. Passive Acoustic Monitoring (PAM) was also implemented for the detection of marine mammal when dredging, reclamation or marine sheet piling works were carried out outside the daylight hours under this Contract. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in November 2014 during the exclusion zone monitoring.

On 10 November 2014, night time marine works was completed. On 20 November 2014, seawall (+2.5mPD) at Northern Landfall has been fully enclosed and marine sheet pile has also been completed. There would be no dredging, reclamation or marine sheet piling works in open waters at this

stage. Thus, PAM and the day-time monitoring of Dolphin Exclusion Zone (DEZ) by dolphin observers were discontinued from 10 November 2014 and 20 November 2014, respectively.

2.4 POST-TRANSLOCATION CORAL MONITORING

The First to Fourth Quarterly Post-Translocation Coral Monitoring have been completed and the results were detailed in the *First to Fourth Quarterly Post-Translocation Coral Monitoring Report*. The findings indicated that the Action or Limit Levels for coral monitoring were not exceeded as increase in percentage of partial mortality was not detected for both the tagged translocated and natural coral colonies when comparing to the pre-translocation dataset.

2.5 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, four (4) site inspections were carried out on 5, 12, 19 and 26 November 2014.

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
5 November 2014	Reclamation Works Area - Portion N-A <ul style="list-style-type: none"> Accumulated general refuse was observed. Oil drum without chemical labels was observed. Reclamation Works Area - Portion N-C <ul style="list-style-type: none"> Inappropriate chemical container for oil was observed. 	Reclamation Works Area - Portion N-A <ul style="list-style-type: none"> The Contractor was reminded to clear general refuse regularly. The Contractor was reminded to provide chemical labels to the oil drum. Reclamation Works Area - Portion N-C <ul style="list-style-type: none"> The Contractor was reminded to provide proper chemical containers.
12 November 2014	Reclamation Works Area - Portion N-C <ul style="list-style-type: none"> Excess muddy water was observed. 	Reclamation Works Area - Portion N-C <ul style="list-style-type: none"> The Contractor was reminded to remove the excess muddy water.
19 November 2014	Reclamation Works Area - Portion N-C <ul style="list-style-type: none"> Chemical containers without drip tray were observed. Chemical containers should be placed inside the drip tray. 	Reclamation Works Area - Portion N-C <ul style="list-style-type: none"> The Contractor was reminded to provide drip tray for the chemical containers. The Contractor was reminded to place the Chemical container inside the drip tray.
26 November 2014	Reclamation Works Area - Portion N-A <ul style="list-style-type: none"> General refuse was observed near the seawall. 	Reclamation Works Area - Portion N-A <ul style="list-style-type: none"> The Contractor was reminded to clear the general refuse.

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

2.6

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), imported fill and marine sediments (Category L). 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 ^(a) (tonnes)	Imported Fill (tonnes)	Inert Construction Waste Re-used (tonnes)	Non-inert Construction Waste ^(b) (tonnes)	Recyclable Materials ^(c) (kg)	Chemical Wastes (kg)	Marine Sediment (m ³)	
							Category L	Category M (M _p & M _f)
November 2014	595	240,167	0	50	0	0	2,320	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.

2.7

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/B	28 January 2014	Throughout the Contract	HyD	Application for VEP on 20 January 2014 to replace EP-354/2009/A
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	19 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	WT00018433-2014	5 June 2014	30 June 2019	DBJV	For site Portion N6 and Reclamation Area E
Construction Noise Permit	GW-RS0362-14	11 May 2014	10 May 2015	DBJV	For site WA23
Construction Noise Permit	GW-RW0706-14	29 September 2014	28 March 2015	DBJV	For Portion N6
Construction Noise Permit	GW-RW0550-14	25 July 2014	24 January 2015	DBJV	For Dredging and Reclamation Works
Construction Noise Permit	GW-RW0674-14	18 September 2014	17 March 2015	DBJV	For GI Works at Southern Landfall
Marine Dumping Permit	EP/MD/15-100	20 October 2014	19 November 2015	DBJV	For Type 1 (Dedicated site) and Type 2 (Confined Marine Disposal)

Notes:

HyD = Highways Department

DBJV = Dragages - Bouygues Joint Venture

VEP = Variation of Environmental Permit

2.8 *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.

2.9 *SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT*

Two Action level exceedances of 1-hr TSP was recorded on 14 November 2014. No Limit Level exceedances for 1-hr TSP were recorded. No Action or Limit Level exceedances for 24-hr TSP were record. Further to the investigation, the recorded exceedance for air quality monitoring was considered to be sporadic event from the cumulative anthropogenic activities (eg traffic emissions from River Trade Terminal) in this area of Hong Kong. The investigation findings are detailed in *Appendix L*.

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

Two Action Level exceedances and no Limit Level exceedances were recorded for the quarterly dolphin monitoring data between September 2014 and November 2014. The observed exceedances will be further investigated in the *Fourth Quarterly EM&A Report* for September 2014 to November 2014.

Cumulative statistics are provided in *Appendix L*.

2.10 *SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS*

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

Two potential environmental complaint cases regarding to the dust emission by works area nearby the River Trade Terminal was referred by EPD on 12 November 2014. The interim report was submitted to EPD on 21 November 2014. The interim findings showed that the cases were considered not related to the works under this Contract and is thus invalid. The complete investigation findings are provided in *Appendix L* ⁽¹⁾.

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

(1) One potential environmental complaint case regarding to the noise generated by derrick light nearby Melody Garden was referred by EPD on 29 October 2014 and reported in the *Twelfth EM&A Monthly Report*. The complete investigation findings are provided in *Appendix L* in this EM&A Monthly Report.

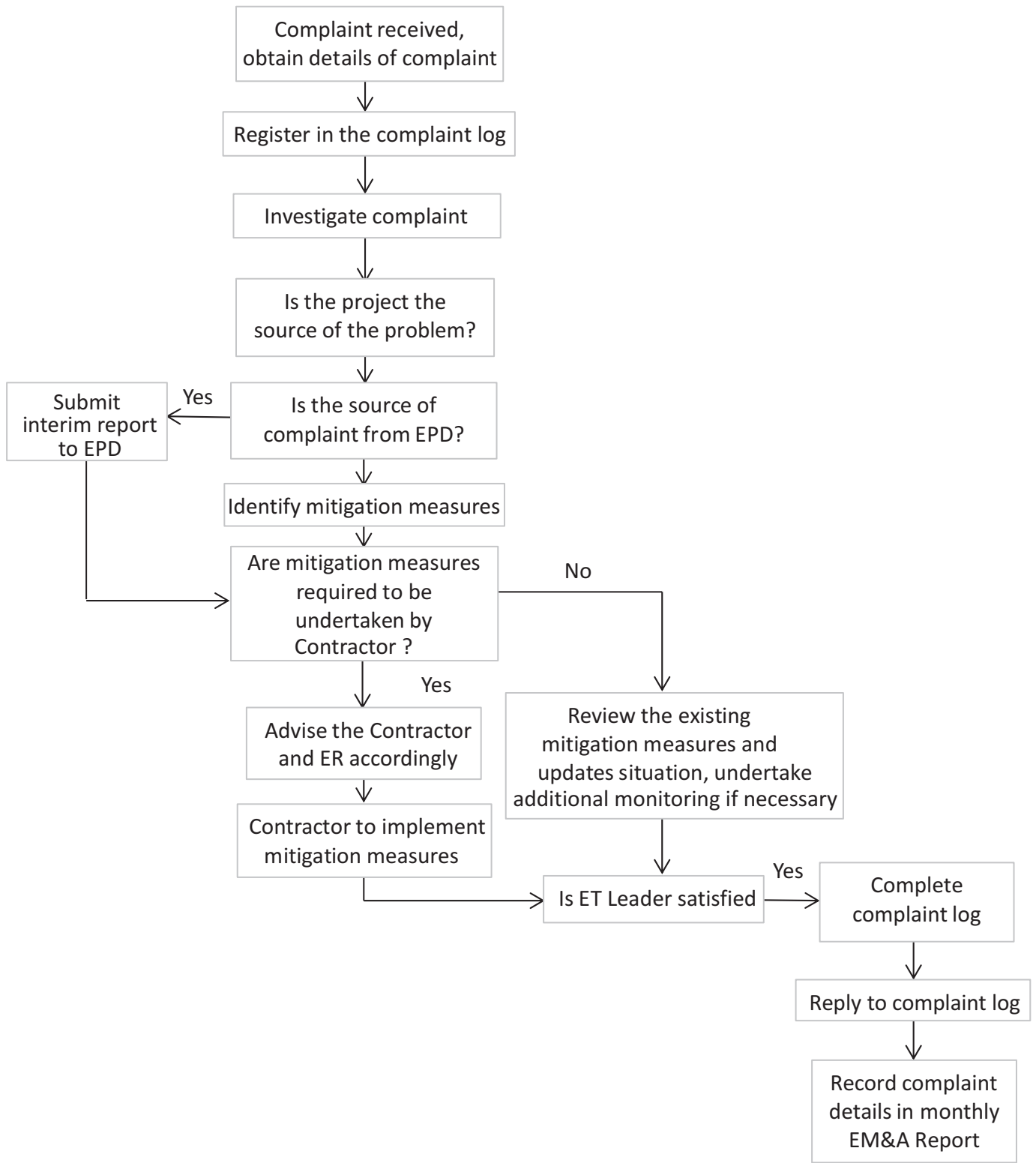


Figure 2.5

Environmental Complaint Handling Procedure

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

3 FUTURE KEY ISSUES

3.1 CONSTRUCTION ACTIVITIES FOR THE COMING MONTH

As informed by the Contractor, the major works for the Project in December 2014 are summarized in *Table 3.1*.

Table 3.1 Construction Works to Be Undertaken in the Coming Month

Works to be undertaken
<i>Land-based Works</i>
<ul style="list-style-type: none">• Land Bored Piling Works at Reclamation Works Area - Portion N-A;• Construction of temporary access at Reclamation Works Area - Portion N-A;• Surcharge set up at Reclamation Works Area - Portion N-C;• Box Culvert Foundation Works at Reclamation Works Area - Portion N-A;• Bored Piling Works at Works Area - N6;• Diaphragm Wall Construction at Reclamation Works Area - Portion N-A; and,• Excavation for North Launching Shaft at Reclamation Works Area - Portion N-A.

3.2 KEY ISSUES FOR THE COMING MONTH

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of December 2014 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 December 2014 is provided in *Appendix F*.

4.1 CONCLUSIONS

This Thirteenth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 30 November 2014, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/B.

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. Two (2) Action Level exceedances of 1-hr TSP was record, whilst no Limit Level exceedances for 1-hr TSP were recorded in this reporting month. No Action or Limit Level exceedances for 24-hr TSP were record. Investigation findings suggested that the observed exceedances for air quality monitoring were considered to be sporadic event from the cumulative anthropogenic activities (eg traffic emissions from River Trade Terminal) in this area of Hong Kong. Nevertheless, the Contractor was reminded to ensure all dust mitigation measures are implemented at the construction site and the proper deployment of silt curtains during the period of marine works under this Contract.

A total of six (6) groups of twenty-nine (29) Chinese White Dolphin sightings were recorded during the two sets of surveys in November 2014. All sighting were made in NWL during the two sets of surveys in November 2014, while no dolphin was sighted in NEL. All except one sighting was made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel. Whilst two Action Level exceedances (one Action Level exceedance for Northeast Lantau social cluster; one Action Level exceedance for Northwest Lantau social cluster) and no Limit Level exceedances were observed for the quarterly dolphin monitoring data between September and November 2014, 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 four (4) times in November 2014. 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.

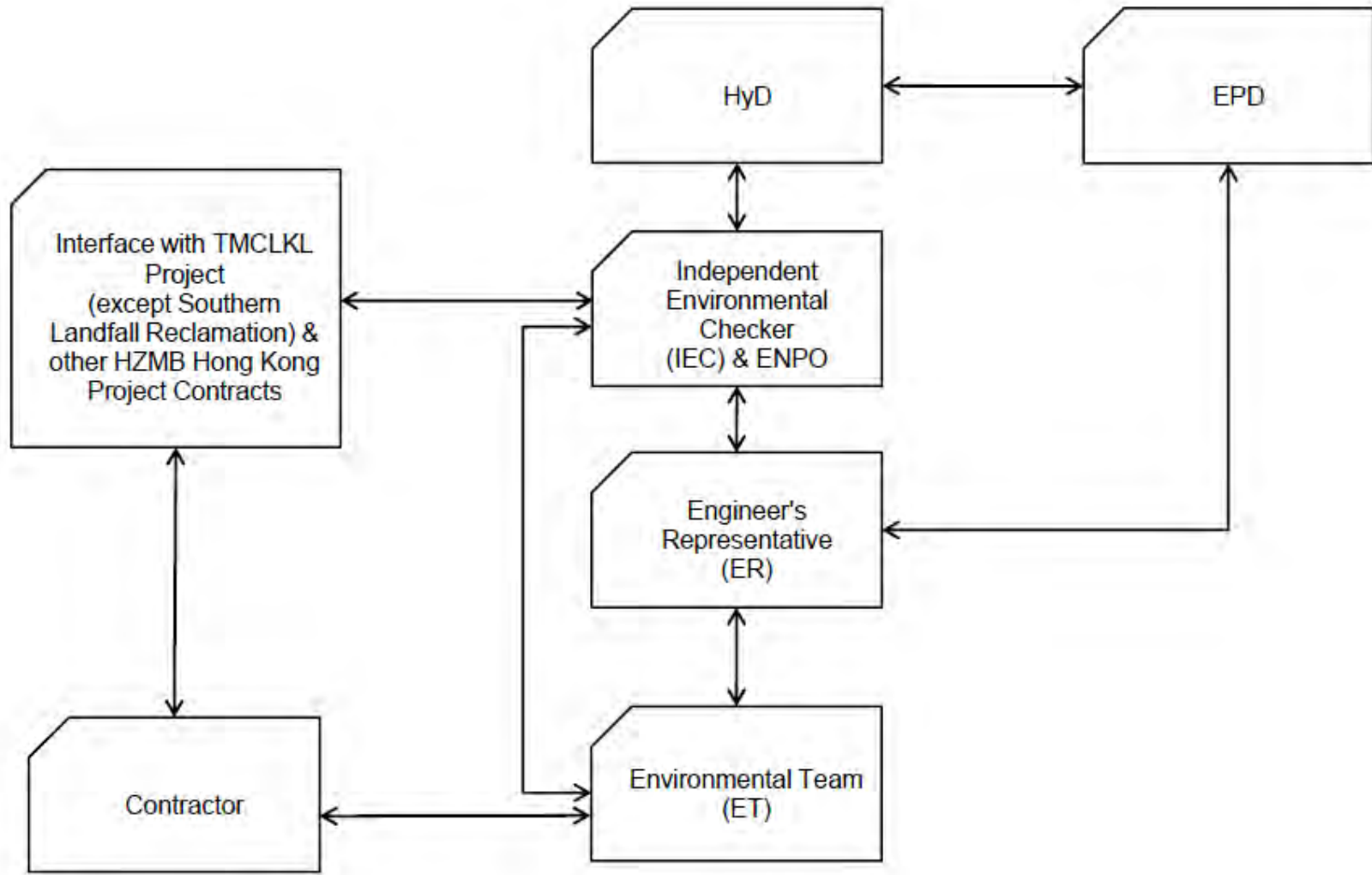
Two potential environmental complaint cases were referred by EPD on 12 November 2014. The investigation findings showed that the case was considered not related to the works under this Contract and is thus invalid.

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	14W47 % Comp	2014					2015				
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr

TMCLK - Northern Connection Sub-Sea Tunnel Section

Contract Dates

Handover Date	HD010	Portions: WA18C	0	06-Jan-15	06-Jan-15*	0%
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General Submissions

Programme	SCC0277	Detailed Works Programme - SCC27.2 - Approval by SO	30	11-Feb-14	12-Mar-14	29-Aug-14A	18-Nov-14	93%
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Environmental

Environmental Permit Submissions

Supplementary WMP of C&C Tunnel at Sth.Landfall	EP2110	Supplementary WMP of C&C Tunnel at Sth.Landfall	0	28-Jun-14	17-Nov-14	0%
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General Design Submissions

(A19) DDA for Roadworks & Project Alignment

DD68310	IPs/ SO's Advance Comments/ ICE Comments	28	26-Jul-14	22-Aug-14	08-Sep-14A	13-Nov-14A	100%
DD68320	Comments Received	0		22-Aug-14		13-Nov-14A	100%
DD68330	Designer to Reply RTC + Update Submission	21	23-Aug-14	17-Sep-14	14-Nov-14A	04-Dec-14	38%
DD68340	Submit Updated DDA to SO/ ICE/ IPs	0	18-Sep-14		05-Dec-14		0%
DD68350	ICE Approval & Issue Check Cert	12	18-Sep-14	03-Oct-14	03-Sep-14A	06-Dec-14	83%
DD68360	Submit ICE Check Cert to SO	6	04-Oct-14	10-Oct-14	08-Dec-14	13-Dec-14	0%
DD68370	SO's Review	35	18-Sep-14	22-Oct-14	05-Dec-14	08-Jan-15	0%
DD68380	SO Approval with Condition R received	0		22-Oct-14		08-Jan-15	0%

(G6) IFA for Tunnel GBP

DD70750	SO's Review	35	29-Apr-14	02-Jun-14	09-Aug-14A	18-Nov-14	94%
DD70760	SO Approval with Condition R received	0		03-Jun-14		18-Nov-14	0%

GEO TGN No. 25 - Geotechnical Risk Register and Risk Mitigation Plan

GEO1030	1st Submission to GEO - GEO TGN No. 25 - Geotechnical Risk Register and Risk Mitigation Plan	0		27-Aug-14		16-Feb-15	0%
GEO1035	1st Submission GEO Review	28	28-Aug-14	24-Sep-14	17-Feb-15	16-Mar-15	0%
GEO1040	Received GEO Comment	0		24-Sep-14		16-Mar-15	0%
GEO1045	Prepare Response to Comment	12	25-Sep-14	10-Oct-14	17-Mar-15	30-Mar-15	0%
GEO1050	2nd Submission to GEO	0		10-Oct-14		30-Mar-15	0%
GEO1055	2nd GEO Review	28	11-Oct-14	07-Nov-14	31-Mar-15	27-Apr-15	0%

ETWB TCW No.15/2005 - Geotechnical Risk Assessment for North C&C, TBM Tunnels and CPs

GEO1060	1st Submission to GEO - ETWB TCW No. 15/2005 - Geotechnical Risk for North C&C, TBM Tunnels and CPs	0		27-Aug-14		16-Feb-15	0%
GEO1065	1st Submission GEO Review	28	28-Aug-14	24-Sep-14	17-Feb-15	16-Mar-15	0%
GEO1070	Received GEO Comment	0		24-Sep-14		16-Mar-15	0%
GEO1075	Prepare Response to Comment	12	25-Sep-14	10-Oct-14	17-Mar-15	30-Mar-15	0%
GEO1080	2nd Submission to GEO	0		10-Oct-14		30-Mar-15	0%
GEO1085	2nd GEO Review	28	11-Oct-14	07-Nov-14	31-Mar-15	27-Apr-15	0%

Construction Supervision Plan

GEO1115	2nd GEO Review	28	29-Mar-14	25-Apr-14	29-Mar-14A	18-Nov-14	93%
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Self contained Cat I/II supervising monthly report

GEO1420	1st Submission to GEO - Self contained Cat I/II supervising monthly report	0		30-May-14		15-Oct-14A	100%
GEO1425	1st Submission GEO Review	28	31-May-14	27-Jun-14	15-Oct-14A	21-Nov-14A	100%
GEO1430	Received GEO Comment	0		27-Jun-14		21-Nov-14A	100%
GEO1435	Prepare Response to Comment	12	28-Jun-14	12-Jul-14	21-Nov-14A	21-Nov-14A	100%
GEO1440	2nd Submission to GEO	0		12-Jul-14		21-Nov-14A	100%
GEO1445	2nd GEO Review	28	13-Jul-14	09-Aug-14	21-Nov-14A	21-Nov-14A	100%

Construction

Northern Landfall

North Reclamation (Phase 1)

Design Submission

(B4) DDA Construction Risk Assessment - Impact on North Landfall

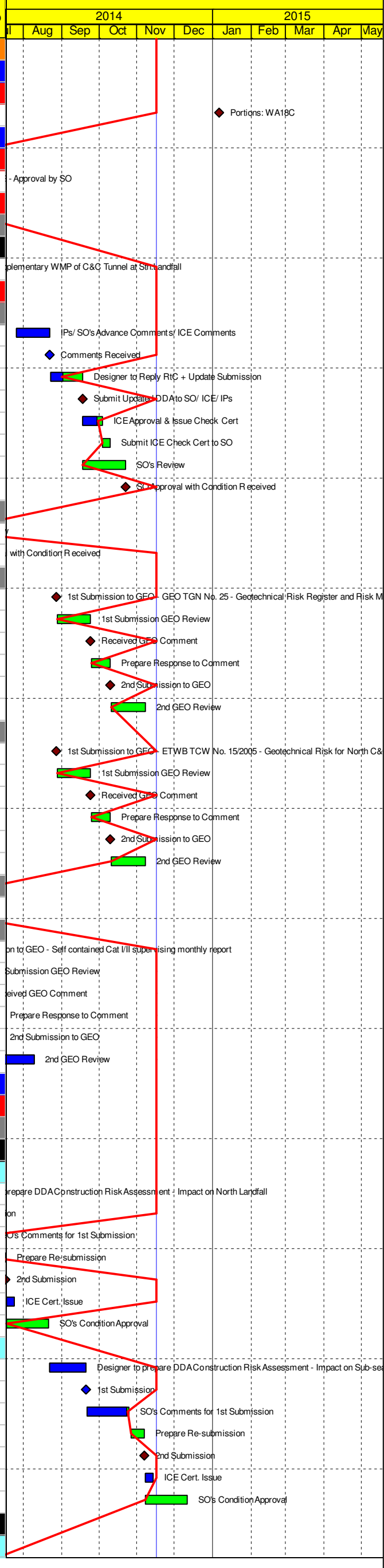
DD68390	Designer to prepare DDA Construction Risk Assessment - Impact on North Landfall	25	02-May-14	31-May-14	25-Jun-14A	26-Sep-14A	100%
DD68400	1st Submission	0		31-May-14		26-Sep-14A	100%
DD68410	SO's Comments for 1st Submission	35	01-Jun-14	05-Jul-14	27-Sep-14A	18-Nov-14	94%
DD68420	Prepare Re-submission	10	07-Jul-14	17-Jul-14	19-Nov-14	29-Nov-14	0%
DD68430	2nd Submission	0		17-Jul-14		29-Nov-14	0%
DD68440	ICE Cert. Issue	6	18-Jul-14	24-Jul-14	16-Oct-14A	22-Oct-14A	100%
DD68490	SO's Condition Approval	35	18-Jul-14	21-Aug-14	30-Nov-14	03-Jan-15	0%

(B4) DDA Construction Risk Assessment - Impact on Sub-sea Tunnel

DD71385	Designer to prepare DDA Construction Risk Assessment - Impact on Sub-sea Tunnel	25	22-Aug-14	20-Sep-14	01-Aug-14A	26-Sep-14A	100%
DD71395	1st Submission	0		20-Sep-14		26-Sep-14A	100%
DD71405	SO's Comments for 1st Submission	35	21-Sep-14	25-Oct-14	27-Sep-14A	05-Jan-15	94%
DD71415	Prepare Re-submission	10	27-Oct-14	06-Nov-14	06-Jan-15	16-Jan-15	0%
DD71420	2nd Submission	0		06-Nov-14		16-Jan-15	0%
DD71425	ICE Cert. Issue	6	07-Nov-14	13-Nov-14	16-Oct-14A	22-Oct-14A	100%
DD71435	SO's Condition Approval	35	07-Nov-14	11-Dec-14	17-Jan-15	20-Feb-15	0%

Method Statement Submission

Method Statement of Construction Methodology of Culvert Extension



■ Planned Bar
■ Planned Bar
◆ Planned Milestone
■ Progress bar
◆ Progress Milestone



Date	Revision	Checked	Approved
21-Feb-14	TMCLK/DBJ/GEN/PR...	SPa	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015						
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
MS1800	Preparation Method Statement for Culvert Extension	25	24-Jun-14	23-Jul-14	17-Nov-14	15-Dec-14	0%												
MS1810	Submit Method Statement to SO	0		23-Jul-14		15-Dec-14	0%												
MS1820	SO Reviews & Comments	28	24-Jul-14	20-Aug-14	16-Dec-14	12-Jan-15	0%												
MS1830	Re-submission	18	21-Aug-14	11-Sep-14	13-Jan-15	02-Feb-15	0%												
MS1840	SO's Review	28	12-Sep-14	09-Oct-14	03-Feb-15	02-Mar-15	0%												
MS1850	SO's Approval	0		09-Oct-14		02-Mar-15	0%												
Construction																			
Milestones																			
NRC13160	Completion of Zone D1 Reclamation up to +14.5mPD	0		18-Oct-14		31-Oct-14A	100%												
NRC13180	Completion of Zone D2 Reclamation up to +14.5mPD	0		11-Nov-14		19-Nov-14A	100%												
NRC13200	Completion of Zone C1 Reclamation up to +10mPD	0		14-Oct-14		23-Oct-14A	100%												
NRC13210	Completion of Zone C2 Reclamation up to +10mPD	0		17-Sep-14		06-Jan-15A	100%												
NRC13230	Completion of Zone B Reclamation up to +6mPD	0		01-Aug-14		26-Sep-14A	100%												
NRC13240	Completion of Zone A1 Reclamation up to +10mPD	0		21-Oct-14		23-Jan-15	0%												
NRC13250	Completion of Zone A2 Reclamation up to +10mPD (TBC)	0		10-Nov-14		12-Feb-15	0%												
Zone E																			
Vertical Seawall																			
NRC10480	VS - Mass Concrete Coping - Zone E - (CH0 to 50)	8	02-May-14	12-May-14	21-Jul-14A	14-Nov-14A	100%												
NRC10490	VS - Mass Concrete Coping - Zone E - (CH50 to 100)	8	13-May-14	21-May-14	23-Jul-14A	03-Nov-14A	100%												
NRC10500	VS - Mass Concrete Coping - Zone E - (CH100 to 150)	8	22-May-14	30-May-14	09-Jul-14A	12-Nov-14A	100%												
NRC10510	VS - Mass Concrete Coping - Zone E - (CH150 to 205)	11	31-May-14	13-Jun-14	16-Jul-14A	20-Nov-14	80%												
Zone D1																			
Vertical Seawall																			
NRC11720	VS - Mass Concrete Coping - Zone D1 - (CH205 to 255)	15	02-May-14	20-May-14	17-Nov-14*	03-Dec-14	0%												
NRC11790	VS - Mass Concrete Coping - Zone D1 - (CH255 to 305)	8	21-May-14	29-May-14	04-Dec-14	12-Dec-14	0%												
NRC11860	VS - Mass Concrete Coping - Zone D1 - (CH305 to 355)	8	30-May-14	09-Jun-14	13-Dec-14	22-Dec-14	0%												
Sloping Seawall																			
NRC120208	VS - Berm Stone - Zone D1 - RTT	2	20-Jun-14	21-Jun-14	17-Nov-14	18-Nov-14	0%												
NRC120209	VS - Mass Concrete Coping - Zone D1 - RTT	4	26-Apr-14	02-May-14	12-Aug-14A	17-Nov-14	80%												
NRC14070	SS - Armour Rock - Zone D1 - (CH255 to 305)	4	03-Jan-14	07-Jan-14	17-Nov-14	20-Nov-14	0%												
NRC14080	SS - Armour Rock - Zone D1 - (CH305 to 355)	4	08-Jan-14	11-Jan-14	21-Nov-14	25-Nov-14	0%												
NRC14120	SS - Mass Concrete Coping - Zone D1 - (CH255 to 305)	7	02-May-14	10-May-14	12-Sep-14A	23-Sep-14A	100%												
NRC14130	SS - Mass Concrete Coping - Zone D1 - (CH305 to 355)	7	12-May-14	19-May-14	24-Sep-14A	03-Oct-14A	100%												
Reclamation																			
NRC13460	Public Fill - Zone D1 - (CH205 to 255) to +14.5mPD	12	06-Sep-14	20-Sep-14	02-Oct-14A	16-Oct-14A	100%												
NRC13470	Public Fill - Zone D1 - (CH255 to 305) to +14.5mPD	11	22-Sep-14	06-Oct-14	04-Oct-14A	17-Oct-14A	100%												
NRC13480	Public Fill - Zone D1 - (CH305 to 355) to +14.5mPD	11	07-Oct-14	18-Oct-14	19-Oct-14A	31-Oct-14A	100%												
NRC15150	Surcharge Period - Zone D1 - (CH205 to 255)	180	21-Sep-14	19-Mar-15	17-Oct-14A	11-Apr-15	21%												
NRC15170	Surcharge Period - Zone D1 - (CH255 to 305)	180	07-Oct-14	04-Apr-15	18-Oct-14A	11-Apr-15	21%												
NRC15190	Surcharge Period - Zone D1 - (CH305 to 355)	180	19-Oct-14	16-Apr-15	01-Nov-14A	21-Apr-15	16%												
Zone D2																			
Vertical Seawall																			
NRC11930	VS - Mass Concrete Coping - Zone D2 - (CH355 to 405)	8	12-May-14	21-May-14	17-Nov-14	25-Nov-14	0%												
NRC11980	VS - Mass Concrete Coping - Zone D2 - (CH405 to 443)	8	23-May-14	03-Jun-14	26-Nov-14	04-Dec-14	0%												
Sloping Seawall																			
NRC14090	SS - Armour Rock - Zone D2 - (CH355 to 405)	4	13-Jan-14	16-Jan-14	26-Nov-14	29-Nov-14	0%												
NRC14100	SS - Armour Rock - Zone D2 - (CH405 to 443)	4	17-Jan-14	21-Jan-14	01-Dec-14	04-Dec-14	0%												
NRC14140	SS - Mass Concrete Coping - Zone D2 - (CH355 to 405)	7	20-May-14	27-May-14	18-Oct-14A	20-Oct-14A	100%												
NRC14150	SS - Mass Concrete Coping - Zone D2 - (CH405 to 443)	7	28-May-14	05-Jun-14	20-Oct-14A	23-Oct-14A	100%												
Reclamation																			
NRC13630	Public Fill - Zone D2 - (CH355 to 405) to +14.5mPD	11	20-Oct-14	31-Oct-14	02-Nov-14A	08-Nov-14A	100%												
NRC13640	Public Fill - Zone D2 - (CH405 to 443) to +14.5mPD	9	01-Nov-14	11-Nov-14	10-Nov-14A	19-Nov-14A	100%												
NRC15210	Surcharge Period - Zone D2 - (CH355 to 405)	180	01-Nov-14	29-Apr-15	09-Nov-14A	05-May-15	8%												
NRC15230	Surcharge Period - Zone D2 - (CH405 to 443)	180	12-Nov-14	10-May-15	19-Nov-14A	16-May-15	2%												
Zone C1																			
Vertical Seawall																			
NRC14680	VS - Berm Stone - Zone C1 - (CH493 to 543)	3	16-Jul-14	18-Jul-14	04-Sep-14A	17-Sep-14A	100%												
NRC14700	VS - Mass Concrete Coping - Zone C1 - (CH443 to 493)	8	10-Jun-14	18-Jun-14	14-Nov-14A	31-Dec-14	25%												
NRC14710	VS - Mass Concrete Coping - Zone C1 - (CH493 to 543)	8	19-Jun-14	27-Jun-14	14-Nov-14A	09-Jan-15	15%												
Sloping Seawall																			
NRC14830	SS - Armour Rock Underlayer - Zone C1 - (CH493 to 543)	5	12-Feb-14	17-Feb-14	17-Nov-14	21-Nov-14	0%												
NRC14850	SS - Armour Rock - Zone C1 - (CH443 to 493)	4	27-Feb-14	03-Mar-14	05-Dec-14	09-Dec-14	0%												
NRC14860	SS - Armour Rock - Zone C1 - (CH493 to 543)	4	04-Mar-14	07-Mar-14	10-Dec-14	13-Dec-14	0%												
NRC14880	SS - Mass Concrete Coping - Zone C1 - (CH443 to 493)	7	10-Jun-14	18-Jun-14	28-Nov-14	05-Dec-14	0%												
NRC14890	SS - Mass Concrete Coping - Zone C1 - (CH493 to 543)	7	18-Jun-14	25-Jun-14	06-Dec-14	13-Dec-14	0%												
Reclamation																			
NRC14050	Public Fill - Zone C1 - (CH443 to 493) to +10.0mPD	6	08-Oct-14	14-Oct-14	29-Sep-14A	23-Oct-14A	100%												
NRC14060	Public Fill - Zone C1 - (CH493 to 543) to +10.0mPD	6	29-Sep-14	07-Oct-14	29-Sep-14A	24-Oct-14A	100%												
NRC15250	Surcharge Period - Zone C1 - (CH443 to 493)	180	15-Oct-14	12-Apr-15	24-Nov-14A	17-Jun-15	16%												

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Date	Revision	Checked	Approved
21-Feb-14	TMCLK/DBJ/GEN/PR...	SPa	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015							
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
NRC12580	VS - Berm Stone - Zone A2 - (CH843 to 893)	3	09-Aug-14	12-Aug-14	24-Nov-14	26-Nov-14	0%													
NRC12590	VS - Berm Stone - Zone A2 - (CH893 to 956)	7	13-Aug-14	20-Aug-14	27-Nov-14	04-Dec-14	0%													
NRC12600	VS - Mass Concrete Coping - Zone A2 - (CH793 to 843)	8	07-Aug-14	15-Aug-14	29-Dec-14	07-Jan-15	0%													
NRC12610	VS - Mass Concrete Coping - Zone A2 - (CH843 to 893)	8	16-Aug-14	25-Aug-14	08-Jan-15	16-Jan-15	0%													
NRC12620	VS - Mass Concrete Coping - Zone A2 - (CH893 to 956)	18	26-Aug-14	16-Sep-14	17-Jan-15	06-Feb-15	0%													
Sloping Seawall																				
NRC12670	SS - Rock Grade 400 - Zone A2 - (CH843 to 893) to +2.5mPD (4k/d)	6	09-Apr-14	15-Apr-14	01-Aug-14A	25-Sep-14A	100%													
NRC12680	SS - Rock Grade 400 - Zone A2 - (CH893 to 956) to +2.5mPD (4k/d)	7	16-Apr-14	26-Apr-14	01-Sep-14A	19-Nov-14A	100%													
NRC12720	SS - Armour Rock Underlayer - Zone A2 - (CH793 to 843)	5	09-Apr-14	14-Apr-14	12-Dec-14	17-Dec-14	0%													
NRC12730	SS - Armour Rock Underlayer - Zone A2 - (CH843 to 893)	5	16-Apr-14	24-Apr-14	18-Dec-14	23-Dec-14	0%													
NRC12740	SS - Armour Rock Underlayer - Zone A2 - (CH893 to 956)	5	28-Apr-14	03-May-14	24-Dec-14	31-Dec-14	0%													
NRC12750	SS - Armour Rock - Zone A2 - (CH793 to 843)	4	05-May-14	09-May-14	10-Jan-15	14-Jan-15	0%													
NRC12760	SS - Armour Rock - Zone A2 - (CH843 to 893)	4	10-May-14	14-May-14	15-Jan-15	19-Jan-15	0%													
NRC12770	SS - Armour Rock - Zone A2 - (CH893 to 956)	4	15-May-14	19-May-14	20-Jan-15	23-Jan-15	0%													
NRC12780	SS - Mass Concrete Coping - Zone A2 - (CH793 to 843)	7	07-Aug-14	14-Aug-14	19-Jan-15	26-Jan-15	0%													
NRC12790	SS - Mass Concrete Coping - Zone A2 - (CH843 to 893)	7	15-Aug-14	22-Aug-14	27-Jan-15	03-Feb-15	0%													
NRC12800	SS - Mass Concrete Coping - Zone A2 - (CH893 to 956)	7	23-Aug-14	30-Aug-14	04-Feb-15	11-Feb-15	0%													
NRC12810	Sloping - Rockfill Type A - Zone A2 - (CH793 to 843)	1	09-Apr-14	09-Apr-14	20-Sep-14A	22-Sep-14A	100%													
NRC12820	Sloping - Rockfill Type A - Zone A2 - (CH843 to 893)	1	16-Apr-14	16-Apr-14	08-Nov-14A	13-Nov-14A	100%													
NRC12830	Sloping - Rockfill Type A - Zone A2 - (CH893 to 956)	1	28-Apr-14	28-Apr-14	21-Nov-14A	21-Nov-14A	100%													
NRC12850	Sloping - Geotextile - Zone A2 - (CH793 to 843)	2	10-Apr-14	11-Apr-14	11-Oct-14 A	11-Oct-14 A	100%													
NRC12860	Sloping - Geotextile - Zone A2 - (CH843 to 893)	2	17-Apr-14	22-Apr-14	11-Oct-14 A	13-Oct-14 A	100%													
NRC12870	Sloping - Geotextile - Zone A2 - (CH893 to 956)	2	29-Apr-14	30-Apr-14	21-Nov-14A	21-Nov-14A	100%													
NRC12880	Sloping - Granular Filter - Zone A2 - (CH793 to 843)	3	12-Apr-14	15-Apr-14	29-Oct-14A	31-Oct-14A	100%													
NRC12890	Sloping - Granular Filter - Zone A2 - (CH843 to 893)	3	23-Apr-14	25-Apr-14	24-Oct-14A	13-Nov-14A	100%													
NRC12900	Sloping - Granular Filter - Zone A2 - (CH893 to 956)	3	02-May-14	05-May-14	22-Nov-14A	22-Nov-14A	100%													
Reclamation																				
NRC12910	Reclamation - Geotextile - Zone A2 - (CH793 to 843) (deleted)	4	14-May-14	17-May-14	29-Sep-14A	29-Sep-14A	100%													
NRC12920	Reclamation - Geotextile - Zone A2 - (CH843 to 893)	4	19-May-14	22-May-14	29-Sep-14A	29-Sep-14A	100%													
NRC12930	Reclamation - Geotextile - Zone A2 - (CH893 to 956)	3	23-May-14	26-May-14	29-Sep-14A	29-Sep-14A	100%													
NRC12940	Reclamation - Sand Blanket - Zone A2 - (CH793 to 843) (deleted)	2	19-May-14	20-May-14	29-Sep-14A	29-Sep-14A	100%													
NRC12960	Reclamation - Sand Blanket - Zone A2 - (CH843 to 893)	3	23-May-14	26-May-14	29-Sep-14A	29-Sep-14A	100%													
NRC12970	Reclamation - Sand Blanket - Zone A2 - (CH893 to 956)	5	27-May-14	31-May-14	29-Sep-14A	29-Sep-14A	100%													
NRC12980	Reclamation - Band Drain - Zone A2 - (CH793 to 843) (deleted)	4	22-May-14	26-May-14	29-Sep-14A	29-Sep-14A	100%													
NRC12990	Reclamation - Band Drain - Zone A2 - (CH843 to 893)	4	27-May-14	30-May-14	04-Oct-14A	06-Oct-14A	100%													
NRC13000	Reclamation - Band Drain - Zone A2 - (CH893 to 956)	5	03-Jun-14	07-Jun-14	04-Oct-14A	06-Oct-14A	100%													
NRC13010	Public Fill - Zone A2 - (CH793 to 843) to -2.5mPD	6	04-Jul-14	10-Jul-14	24-Sep-14A	05-Oct-14A	100%													
NRC13020	Public Fill - Zone A2 - (CH843 to 893) to -2.5mPD	6	11-Jul-14	17-Jul-14	03-Oct-14A	04-Nov-14A	100%													
NRC13030	Public Fill - Zone A2 - (CH893 to 956) to -2.5mPD	4	18-Jul-14	22-Jul-14	03-Nov-14A	17-Nov-14	80%													
NRC13040	Public Fill - Zone A2 - (CH793 to 843) to +2.5mPD	7	02-Aug-14	09-Aug-14	26-Sep-14A	23-Oct-14A	100%													
NRC13050	Public Fill - Zone A2 - (CH843 to 893) to +2.5mPD	7	11-Aug-14	18-Aug-14	24-Oct-14A	14-Nov-14A	100%													
NRC13070	Public Fill - Zone A2 - (CH893 to 956) to +2.5mPD	6	19-Aug-14	25-Aug-14	13-Nov-14A	19-Nov-14	70%													
NRC13080	Public Fill - Zone A2 - (CH793 to 843) to +6.0mPD	7	11-Aug-14	18-Aug-14	18-Oct-14A	31-Oct-14A	100%													
NRC13090	Public Fill - Zone A2 - (CH843 to 893) to +6.0mPD	7	19-Aug-14	26-Aug-14	02-Nov-14A	20-Nov-14	55%													
NRC13100	Public Fill - Zone A2 - (CH893 to 956) to +6.0mPD	6	27-Aug-14	02-Sep-14	21-Nov-14	27-Nov-14	0%													
NRC13110	Public Fill - Zone A2 - (CH793 to 843) to +10mPD	6	22-Oct-14	28-Oct-14	24-Jan-15	30-Jan-15	0%													
NRC13120	Public Fill - Zone A2 - (CH843 to 893) to +10mPD	7	29-Oct-14	05-Nov-14	31-Jan-15	07-Feb-15	0%													
NRC13130	Public Fill - Zone A2 - (CH893 to 956) to +10mPD	4	06-Nov-14	10-Nov-14	09-Feb-15	12-Feb-15	0%													
NRC15390	Surcharge Period - Zone A2 - (CH793 to 843)	180	11-Nov-14	09-May-15	13-Feb-15	11-Aug-15	0%													
NRC16960	NewActivity	0			17-Nov-14	18-Nov-14	0%													
Zone F																				
CH137 to CH184																				
A6416115	F - Backfilling up to +0.5mPD & T3 Installation - CH137 to CH184	6	22-Jan-14	27-Jan-14	15-Sep-14A	06-Oct-14A	100%													
A6416118	F - Backfilling up to +3.0mPD - CH137 to CH184	2	28-Jan-14	29-Jan-14	07-Oct-14A	10-Oct-14A	100%													
A6416120	F - Backfilling up to +4.0mPD - CH137 to CH184	2	30-Jan-14	31-Jan-14	10-Oct-14A	12-Oct-14A	100%													
A6416320	F - Anchor Wall Installation - CH160 to CH184	2	07-Mar-14	08-Mar-14	10-Oct-14A	11-Oct-14A	100%													
CH184 to CH231																				
A6416070	F - Backfilling up to -4.5mPD - CH184 to CH231	2	27-Jan-14	28-Jan-14	27-Aug-14A	08-Oct-14A	100%													
A6416080	F - Backfilling up to +0.5mPD & T3 Installation - CH184 to CH231	6	29-Jan-14	03-Feb-14	22-Sep-14A	20-Oct-14A	100%													
A6416085	F - Backfilling up to +3.0mPD - CH184 to CH231	2	04-Feb-14	05-Feb-14	18-Oct-14A	05-Nov-14A	100%													
A6416090	F - Backfilling up to +6.0mPD - CH184 to CH231	2	06-Feb-14	07-Feb-14	06-Nov-14A	08-Nov-14A	100%													
A6416230	F - Anchor wall Installation - CH184 to CH231	4	10-Mar-14	13-Mar-14	17-Nov-14	20-Nov-14	0%													
A6416290	F - Backfilling up to 0.0mPD & G2 Installation to Anchor Wall - CH184 to CH231	3	14-Mar-14	16-Mar-14	21-Nov-14	23-Nov-14	0%													
A6416295	F - Backfilling up to +3.0mPD & G1 Installation to Anchor Wall - CH184 to CH231	2	17-Mar-14	18-Mar-14	24-Nov-14	25-Nov-14	0%													
A6416300	F - Backfilling up to +6.0mPD to Anchor Wall - CH184 to CH231	2	19-Mar-14	20-Mar-14	26-Nov-14	27-Nov-14	0%													
A6416400	F - Backfilling to +6.0mPD to Existing Seawall - CH184 to CH231	1	21-Mar-14	21-Mar-14	28-Nov-14	28-Nov-14	0%													
CH231 to CH278																				
A6416260	F - Backfilling up to -7.5mPD & T1 Installation - CH231 to CH278	4	22-Mar-14	25-Mar-14	03-Nov-14A	23-Nov-14	75%													
A6416270	F - Backfilling up to -4.5mPD - CH231 to CH278	2	26-Mar-14	27-Mar-14	29-Nov-14	30-Nov-14	0%													

■ Planned Bar
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◆ Planned Milestone
■ Progress bar
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TMCLK - Northern Connection Sub-Sea Tunnel Section
Detailed Works Programme
Progress as of 17-Nov-14



Date	Revision	Checked	Approved
21-Feb-14	TMCLK/DBJ/GEN/PR...	SPa	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015							
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		
A6416273	F - Backfilling up to +0.5mPD & T3 Installation - CH231 to CH278	6	28-Mar-14	02-Apr-14	03-Dec-14	08-Dec-14	0%													
A6416278	F - Backfilling up to +3.0mPD - CH231 to CH278	2	03-Apr-14	04-Apr-14	09-Dec-14	10-Dec-14	0%													
A6416280	F - Backfilling up to +6.0mPD - CH231 to CH278	2	05-Apr-14	06-Apr-14	11-Dec-14	12-Dec-14	0%													
A6416310	F - Anchor wall Installation - CH231 to CH278	4	07-Apr-14	10-Apr-14	13-Dec-14	17-Dec-14	0%													
A6416480	F - Backfilling up to 0.0mPD & G2 Installation to Anchor Wall - CH231 to CH278	3	11-Apr-14	13-Apr-14	18-Dec-14	20-Dec-14	0%													
A6416490	F - Backfilling up to +3.0mPD & G1 Installation to Anchor Wall - CH231 to CH278	2	14-Apr-14	15-Apr-14	21-Dec-14	22-Dec-14	0%													
A6416500	F - Backfilling up to +6.0mPD to Anchor Wall - CH231 to CH278	2	16-Apr-14	17-Apr-14	23-Dec-14	24-Dec-14	0%													
A6416510	F - Backfilling to +6.0mPD to Existing Seawall - CH231 to CH278	1	18-Apr-14	18-Apr-14	25-Dec-14	25-Dec-14	0%													

CH278 to CH327

A6416190	F - Marine Sheet Piling (H1) - CH278 to CH327	5	25-Feb-14	01-Mar-14	29-Sep-14A	09-Oct-14A	100%													
A6416195	F - Marine Sheet Piling (H2) - CH278 to CH327	5	12-Mar-14	17-Mar-14	28-Oct-14A	05-Nov-14A	100%													
A6416200	F - Backfilling up to -3.5mPD & T2 Installation - CH278 to CH327	5	18-Mar-14	22-Mar-14	24-Nov-14	28-Nov-14	0%													
A6416210	F - Backfilling up to +0.5mPD - CH278 to CH327	4	23-Mar-14	26-Mar-14	29-Nov-14	02-Dec-14	0%													
A6416215	F - Backfilling up to +3.0mPD & T4 Installation - CH278 to CH327	5	27-Mar-14	31-Mar-14	03-Dec-14	07-Dec-14	0%													
A6416220	F - Backfilling up to +6.0mPD - CH278 to CH327	2	01-Apr-14	02-Apr-14	08-Dec-14	09-Dec-14	0%													
A6416340	F - Anchor wall Installation - CH278 to CH327	4	11-Apr-14	15-Apr-14	18-Dec-14	22-Dec-14	0%													
A6416520	F - Backfilling up to 0.0mPD & G2 Installation to Anchor Wall - CH278 to CH327	3	16-Apr-14	18-Apr-14	23-Dec-14	25-Dec-14	0%													
A6416530	F - Backfilling up to +3.0mPD & G1 Installation to Anchor Wall - CH278 to CH327	3	19-Apr-14	21-Apr-14	26-Dec-14	28-Dec-14	0%													
A6416540	F - Backfilling up to +6.0mPD to Anchor Wall - CH278 to CH327	3	22-Apr-14	24-Apr-14	29-Dec-14	31-Dec-14	0%													
A6416550	F - Backfilling to +6.0mPD to Existing Seawall - CH278 to CH327	1	25-Apr-14	25-Apr-14	01-Jan-15	01-Jan-15	0%													

CH327 to CH381

A6416140	F - Marine Sheet Piling (H1) - CH327 to CH381	4	03-Mar-14	06-Mar-14	30-Aug-14A	23-Oct-14A	100%													
A6416145	F - Marine Sheet Piling (H2) - CH327 to CH381	4	07-Mar-14	11-Mar-14	15-Sep-14A	23-Oct-14A	100%													
A6416150	F - Backfilling up to -3.5mPD & T2 Installation - CH327 to CH381	4	12-Mar-14	15-Mar-14	08-Nov-14A	23-Nov-14	85%													
A6416155	F - Backfilling up to +0.5mPD - CH327 to CH381	3	16-Mar-14	18-Mar-14	24-Nov-14	26-Nov-14	0%													
A6416160	F - Backfilling up to +3.0mPD & T4 Installation - CH327 to CH381	5	19-Mar-14	23-Mar-14	27-Nov-14	01-Dec-14	0%													
A6416170	F - Backfilling up to +6.0mPD - CH327 to CH381	3	24-Mar-14	26-Mar-14	02-Dec-14	04-Dec-14	0%													
A6416370	F - Anchor wall Installation - CH327 to CH381	3	16-Apr-14	22-Apr-14	23-Dec-14	27-Dec-14	0%													
A6416560	F - Backfilling up to 0.0mPD & G2 Installation to Anchor Wall - CH327 to CH381	3	23-Apr-14	25-Apr-14	28-Dec-14	30-Dec-14	0%													
A6416570	F - Backfilling up to +3.0mPD & G1 Installation to Anchor Wall - CH327 to CH381	3	26-Apr-14	28-Apr-14	31-Dec-14	02-Jan-15	0%													
A6416580	F - Backfilling up to +6.0mPD to Anchor Wall - CH327 to CH381	2	29-Apr-14	30-Apr-14	03-Jan-15	04-Jan-15	0%													
A6416590	F - Backfilling to +6.0mPD to Existing Seawall - CH327 to CH381	1	01-May-14	01-May-14	05-Jan-15	05-Jan-15	0%													

Box Culvert Extension

Design Submission

(D10) IFA Temp.works - Extension of Existing Culvert adjacent to RTT

DD04360	SO's Review	35	20-May-14	23-Jun-14	18-Jul-14A	04-Oct-14A	100%													
DD04370	SO Approval with Condition Received	0		23-Jun-14		04-Oct-14A	100%													
DD04960	Works Commencement - Temporary ELS for Box Culvert (Stage 3)	0	02-Jul-14			04-Oct-14A	100%													

Construction

CH000 to CH137

A6416670	Bored Pile Construction - A43 to A62 (4 Rigs) & Land Sheet Piling	96	31-May-14	23-Sep-14	21-Jul-14A	14-Nov-14A	100%													
A6416680	Backfilling for Surcharge	18	24-Sep-14	16-Oct-14	17-Nov-14	06-Dec-14	0%													
A6416690	Surcharge Period	180	17-Oct-14	14-Apr-15	07-Dec-14	04-Jun-15	0%													

CH137 to CH184

A6416610	Predrilling - CH137 to CH184	24	07-Feb-14	06-Mar-14	16-Oct-14A	07-Nov-14A	100%													
A6416720	Bored Pile Construction - A42 to A35	160	07-Mar-14	19-Sep-14	14-Jul-14A	19-Nov-14A	100%													
A6416770	Backfilling for Surcharge	12	20-Sep-14	06-Oct-14	17-Nov-14	29-Nov-14	0%													
A6416780	Surcharge Period	180	07-Oct-14	04-Apr-15	30-Nov-14	28-May-15	0%													

CH184 to CH231

A6416620	Predrilling - CH184 to CH231	24	22-Mar-14	23-Apr-14	08-Nov-14A	17-Dec-14	33%													
A6416730	Bored Pile Construction - A34 to A27	156	22-Mar-14	30-Sep-14	30-Oct-14A	13-May-15	18%													
A6416790	Backfilling for Surcharge	12	03-Oct-14	16-Oct-14	14-May-15	28-May-15	0%													
A6416860	Surcharge Period	105	17-Oct-14	26-Feb-15	29-May-15	02-Oct-15	0%													
A6417160	Surcharge Removal - CH184 to CH231	6	27-Feb-15	05-Mar-15	03-Oct-15	09-Oct-15	0%													

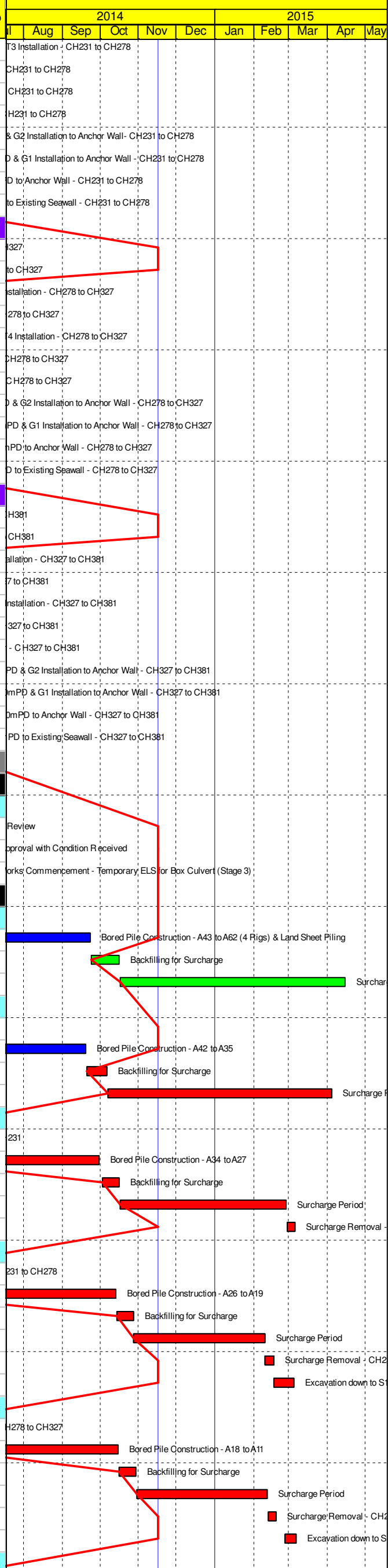
CH231 to CH278

A6416630	Predrilling - CH231 to CH278	24	22-Apr-14	21-May-14	27-Dec-14	24-Jan-15	0%													
A6416740	Bored Pile Construction - A26 to A19	143	22-Apr-14	13-Oct-14	27-Dec-14	27-Jun-15	0%													
A6416800	Backfilling for Surcharge	12	14-Oct-14	27-Oct-14	29-Jun-15	13-Jul-15	0%													
A6416830	Surcharge Period	105	28-Oct-14	09-Feb-15	14-Jul-15	26-Oct-15	0%													
A6417200	Surcharge Removal - CH231 to CH278	6	10-Feb-15	16-Feb-15	27-Oct-15	02-Nov-15	0%													
A6417210	Excavation down to S1 level - CH231 to CH278	8	17-Feb-15	04-Mar-15	03-Nov-15	11-Nov-15	0%													

CH278 to CH327

A6416640	Predrilling - CH278 to CH327	24	26-Apr-14	26-May-14	02-Jan-15	29-Jan-15	0%													
A6416750	Bored Pile Construction - A18 to A11	117	27-May-14	15-Oct-14	30-Jan-15	30-Jun-15	0%													
A6416810	Backfilling for Surcharge	12	16-Oct-14	29-Oct-14	02-Jul-15	15-Jul-15	0%													
A6416840	Surcharge Period	105	30-Oct-14	11-Feb-15	16-Jul-15	28-Oct-15	0%													
A6417240	Surcharge Removal - CH278 to CH327	6	12-Feb-15	18-Feb-15	29-Oct-15	04-Nov-15	0%													
A6417250	Excavation down to S1 level - CH278 to CH327	8	26-Feb-15	06-Mar-15	05-Nov-15	13-Nov-15	0%													

CH327 to CH381



■ Planned Bar
■ Planned Bar
■ Progress bar
◆ Progress Milestone



Date	Revision	Checked	Approved
21-Feb-14	TMCLK/DBJ/GEN/PR...	SPa	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015						
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
A6416650	Predrilling - CH327 to CH381	24	02-May-14	30-May-14	06-Jan-15	02-Feb-15	0%												
A6416760	Bored Pile Construction - A10 to A03	86	31-May-14	11-Sep-14	03-Feb-15	27-May-15	0%												
A6416850	Surcharge Period	105	26-Sep-14	08-Jan-15	11-Jun-15	23-Sep-15	0%												
A6417280	Surcharge Removal - CH327 to CH381	6	09-Jan-15	15-Jan-15	24-Sep-15	02-Oct-15	0%												
A6417290	Excavation down to S1 level - CH327 to CH381	9	16-Jan-15	26-Jan-15	03-Oct-15	13-Oct-15	0%												
A6417300	S1 Installation - CH327 to CH381	9	27-Jan-15	05-Feb-15	14-Oct-15	24-Oct-15	0%												
A6417310	Excavation down to Formation level - CH327 to CH381	6	06-Feb-15	12-Feb-15	26-Oct-15	31-Oct-15	0%												
A6417320	Box Culvert Construction - CH327 to CH381	142	13-Feb-15	13-Aug-15	02-Nov-15	29-Apr-16	0%												
CH381 to CH399 (Box Culvert Connection)																			
A6416660	F - Prebored H-piles for CKS Temporary Land Access	6	18-Feb-14	24-Feb-14	17-Nov-14	22-Nov-14	0%												
A6417000	F - Steel Bridge Installation for Land Access to Zone E	52	25-Feb-14	30-Apr-14	24-Nov-14	26-Jan-15	0%												
A6417010	F - Available of Land Access to Zone E	0	02-May-14		27-Jan-15		0%												
North Shafts Construction & Tunnel Structure																			
Design Submission																			
(A18) DDA Instrumentation & Monitoring Plan & AAA Values for North and South Landfalls																			
DD71350	SO's Review	35	10-May-14	14-Jun-14	12-Sep-14A	22-Sep-14A	100%												
DD71360	SO Approval with Condition R received	0		14-Jun-14		22-Sep-14A	100%												
DD71375	Works Commencement - North temp ELS works - 01Aug14	0	01-Aug-14		22-Sep-14A		100%												
(C1) DDA for North C&C Tunnel Permanent Structure																			
DD00315	IPs/SO's Advance comments / ICE comments	28	12-Mar-14	15-Apr-14	29-Aug-14A	22-Oct-14A	100%												
DD00330	IPs/ SO's Advance Comments/ ICE Comments	28	15-Apr-14	13-May-14	22-Oct-14A	22-Oct-14A	100%												
DD00340	Comments Received	0		13-May-14		22-Oct-14A	100%												
DD00350	Designer to Reply RTC + Update Submission	15	13-May-14	30-May-14	23-Oct-14A	21-Nov-14A	100%												
DD00360	Submit Updated DDA to SO/ ICE/ IPs	0	30-May-14		21-Nov-14A		100%												
DD00370	ICE Approval & Issue Check Cert	18	30-May-14	21-Jun-14	17-Nov-14	06-Dec-14	0%												
DD00380	Submit ICE Check Cert to SO	0		21-Jun-14		06-Dec-14	0%												
DD00390	IPs Review	28	30-May-14	27-Jun-14	21-Nov-14A	13-Dec-14	4%												
DD00400	IPs No Objection Received	0		27-Jun-14		13-Dec-14	0%												
DD00440	SO's Review	35	30-May-14	04-Jul-14	21-Nov-14A	20-Dec-14	2%												
DD00450	SO Approval with Condition R received	0		04-Jul-14		20-Dec-14	0%												
DD00670	Works Commencement - North C&C Tunnel Permanent Barette	0	07-Jul-14		17-Nov-14*		0%												
(C1) DDA for North Approach Ramp Permanent Structure																			
DD70770	Preparation DDANorth Approach Ramp Permanent Structure	18	04-Jul-14	25-Jul-14	22-Dec-14	14-Jan-15	0%												
DD70780	Review & Comment by JV	12	25-Jul-14	08-Aug-14	15-Jan-15	28-Jan-15	0%												
DD70785	Designer prepare DDA	6	08-Aug-14	15-Aug-14	29-Jan-15	04-Feb-15	0%												
DD70790	Formal Submission of DDA to ICE/ IPs	0		15-Aug-14		04-Feb-15	0%												
DD70792	Advanced Submission to SO	0		15-Aug-14		04-Feb-15	0%												
DD70794	IPs/SO's Advance comments / ICE comments	28	16-Aug-14	19-Sep-14	05-Feb-15	11-Mar-15	0%												
DD70800	IPs/ SO's Advance Comments/ ICE Comments	28	19-Sep-14	17-Oct-14	11-Mar-15	08-Apr-15	0%												
DD70805	Comments Received	0		17-Oct-14		08-Apr-15	0%												
DD70810	Designer to Reply RTC + Update Submission	15	17-Oct-14	04-Nov-14	08-Apr-15	25-Apr-15	0%												
DD70820	Submit Updated DDA to SO/ ICE/ IPs	0	04-Nov-14		25-Apr-15		0%												
DD70830	ICE Approval & Issue Check Cert	18	04-Nov-14	25-Nov-14	25-Apr-15	18-May-15	0%												
DD70840	Submit ICE Check Cert to SO	0		25-Nov-14		18-May-15	0%												
DD70850	IPs Review	28	04-Nov-14	02-Dec-14	25-Apr-15	23-May-15	0%												
DD70860	IPs No Objection Received	0		02-Dec-14		23-May-15	0%												
DD70870	SO's Review	35	04-Nov-14	09-Dec-14	25-Apr-15	30-May-15	0%												
DD70880	SO Approval with Condition R received	0		09-Dec-14		30-May-15	0%												
(D2) DDA Temp.works - North Ventilation Shaft ELS																			
DD03350	Designer prepare DDA	10	27-Mar-14	08-Apr-14	07-May-14A	30-Sep-14A	100%												
DD03360	Formal Submission of DDA to ICE/ IPs	0		08-Apr-14		30-Sep-14A	100%												
DD03370	Advanced Submission to SO	0		08-Apr-14		30-Sep-14A	100%												
DD03380	IPs/ SO's Advance Comments/ ICE Comments	28	09-Apr-14	06-May-14	03-Oct-14A	29-Oct-14A	100%												
DD03390	Comments Received	0		07-May-14		29-Oct-14A	100%												
DD03400	Designer to Reply RTC + Update Submission	21	07-May-14	30-May-14	29-Oct-14A	18-Nov-14A	100%												
DD03410	Submit Updated DDA to SO/ ICE/ IPs	0	31-May-14		18-Nov-14A		100%												
DD03420	ICE Approval & Issue Check Cert	12	31-May-14	14-Jun-14	29-Sep-14A	14-Nov-14A	100%												
DD03430	Submit ICE Check Cert to SO	6	16-Jun-14	21-Jun-14	15-Nov-14A	18-Nov-14A	100%												
DD03440	IPs Review	28	31-May-14	27-Jun-14	18-Nov-14A	10-Dec-14	14%												
DD03450	IPs No Objection Received	0		27-Jun-14		10-Dec-14	0%												
DD03490	SO's Review	35	31-May-14	04-Jul-14	18-Nov-14A	17-Dec-14	11%												
DD03495	SO Approval with Condition R received	0		04-Jul-14		17-Dec-14	0%												
DD03515	Works Commencement - TBM Change Diameter Shaft - 04Aug14	0	04-Aug-14		18-Dec-14*		0%												
ETWB TCW No 15/2005 - ELS Design for Ventilation Shaft at Northern Landfall																			
GEO1170	2nd Submission to GEO	0		23-Sep-14		02-May-14A	100%												
GEO1175	2nd GEO Review	28	24-Sep-14	21-Oct-14	02-May-14A	02-May-14A	100%												
Construction																			
North Launching Shaft ELS Foundation & Capping Beam (Cell 1 to 3)																			
NSH1340	E - Cell 1-3 - Diaphragm Wall & Toe Grouting - Shaft ELS	54	02-May-14	07-Jul-14	07-Jul-14A	19-Oct-14A	100%												

■ Planned Bar
■ Planned Bar
◆ Planned Milestone
■ Progress bar
◆ Progress Milestone

TMCLK - Northern Connection Sub-Sea Tunnel Section
 Detailed Works Programme
 Progress as of 17-Nov-14



Date	Revision	Checked	Approved
21-Feb-14	TMCLK/DBJ/GEN/PR...	SPa	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015								
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
NSH1350	E - Cell 1-3 - Diaphragm Wall & Toe Grouting - Perm Barette	26	08-Jul-14	06-Aug-14	23-Aug-14A	19-Oct-14A	100%														
NSH1360	E - Cell 1-3 - Capping beam Installation	18	08-Jul-14	28-Jul-14	25-Aug-14A	14-Nov-14A	100%														
NSH1370	E - Cell 1-3 - Instrumentation & Pump well Installation	6	31-Jul-14	06-Aug-14	23-Aug-14A	15-Nov-14A	100%														
NSH1430	E - Pumping Test for TBM Launching Shaft ELS - Cell 1-3	5	07-Aug-14	11-Aug-14	03-Nov-14A	12-Nov-14A	100%														
North Launching Shaft Excavation (Cell 1 to 3)																					
NSH1440	E - Cell 1 to 3 - Shaft Excavation	77	12-Aug-14	12-Nov-14	06-Oct-14A	22-Dec-14	60%														
North Launching Shaft ELS Foundation & Capping Beam																					
NSH1190	E - Cell 4 to 6 - Diaphragm Wall & Toe Grouting - Shaft ELS (deleted)	49	08-Jul-14	02-Sep-14	29-Sep-14A	29-Sep-14A	100%														
NSH1200	E - Cell 4 to 6 - Diaphragm Wall & Toe Grouting - Perm Barette (deleted)	4	03-Sep-14	06-Sep-14	29-Sep-14A	29-Sep-14A	100%														
NSH1210	E - Cell 4 to 6 - Prebored H-piles - Perm (deleted)	21	02-May-14	27-May-14	28-Sep-14A	29-Sep-14A	100%														
NSH1220	E - Cell 4 to 6 - Capping beam Installation(deleted)	18	03-Sep-14	24-Sep-14	29-Sep-14A	29-Sep-14A	100%														
NSH1230	E - Cell 4 to 6 - Instrumentation & Pump well Installation (deleted)	4	20-Sep-14	24-Sep-14	29-Sep-14A	29-Sep-14A	100%														
NSH1380	E - Pumping Test for TBM Launching Shaft ELS - Cell 4 to 6 (deleted)	6	25-Sep-14	30-Sep-14	29-Sep-14A	29-Sep-14A	100%														
North Launching Shaft Excavation																					
NSH1400	E - Cell 4 to 6 - Shaft Excavation (deleted)	31	03-Oct-14	07-Nov-14	29-Sep-14A	29-Sep-14A	100%														
North Launching Shaft Base Slab for TBM Launching																					
NSH1455	E - Tympanum construction for TBM break-in	12	20-Nov-14	03-Dec-14	02-Jan-15	15-Jan-15	0%														
NSH1460	E - Cell 1 to 2 - Base Slab construction	22	13-Nov-14	08-Dec-14	23-Dec-14	20-Jan-15	0%														
NSH1465	E - Cell 3 to 4 - Excavation to ML03 formation level	6	09-Dec-14	15-Dec-14	21-Jan-15	27-Jan-15	0%														
NSH1470	E - Cell 3 to 4 - ML3 Base Slab construction	12	16-Dec-14	31-Dec-14	28-Jan-15	10-Feb-15	0%														
NSH1480	E - Cell 5 - Temporary backfilling for ML03 logistic	6	02-Jan-15	08-Jan-15	11-Feb-15	17-Feb-15	0%														
NSH1490	E - Cell 3 to 4 - Excavation to ML02 formation level	6	02-Jan-15	08-Jan-15	11-Feb-15	17-Feb-15	0%														
NSH1500	E - Cell 3 to 4 - ML02 Base Slab construction	18	09-Jan-15	29-Jan-15	18-Feb-15	17-Mar-15	0%														
NSH1510	E - Cell 5 - Temporary backfilling for ML02 logistic	6	30-Jan-15	05-Feb-15	18-Mar-15	24-Mar-15	0%														
North Ventilation Shaft ELS Foundation & Capping Beam																					
A6415775	B - Setup for Shaft ELS Foundation	20	02-Aug-14	25-Aug-14	27-Oct-14A	31-Oct-14A	100%														
A6415780	B - Diaphragm Wall - Shaft ELS	81	26-Aug-14	01-Dec-14	01-Nov-14A	26-Feb-15	3%														
A6415790	B - Instrumentation & Pump well Installation	6	02-Dec-14	08-Dec-14	27-Feb-15	05-Mar-15	0%														
A6415795	B - Pumping Test for Excavation	7	09-Dec-14	15-Dec-14	06-Mar-15	12-Mar-15	0%														
North Ventilation Shaft Excavation & Base Slab																					
A6415800	B - Vent Shaft Excavation (+6.0 to +4.0mPD) - Reclaimed Fill	5	02-Dec-14	06-Dec-14	27-Feb-15	04-Mar-15	0%														
A6415810	B - Capping Beam Installation (+6.0mPD)	12	08-Dec-14	20-Dec-14	05-Mar-15	18-Mar-15	0%														
A6415820	B - Vent Shaft Excavation (+4.0 to -8.0mPD) - Reclaimed Fill	19	22-Dec-14	15-Jan-15	19-Mar-15	14-Apr-15	0%														
A6415830	B - Ring Beam Installation (-5.5mPD)	6	16-Jan-15	22-Jan-15	15-Apr-15	21-Apr-15	0%														
A6415840	B - Vent Shaft Excavation (-8.0 to -20.0mPD) - Fill/MD/ALLUVIUM	27	23-Jan-15	02-Mar-15	22-Apr-15	23-May-15	0%														
CLP Temporary Substation																					
Construction																					
DDP12800	1st Batch - CLP Installation & Commissioning	108	02-Jul-14	07-Nov-14	02-Jul-14A	21-Nov-14	95%														
DDP12810	11kV Equipment / Switch Room installation by JV	48	20-Aug-14	18-Oct-14	20-Aug-14A	31-Oct-14A	100%														
DDP12820	FS Installation by JV	24	11-Oct-14	08-Nov-14	11-Oct-14A	25-Oct-14A	100%														
DDP12830	1st batch - Noise Measurement (deleted)	12	08-Nov-14	21-Nov-14	21-Nov-14A	21-Nov-14A	100%														
DDP12840	Final FS Installation by JV	6	08-Nov-14	14-Nov-14	22-Nov-14	28-Nov-14	0%														
DDP12850	FSD inspection for 1st Transformer Energization	12	15-Nov-14	28-Nov-14	29-Nov-14	12-Dec-14	0%														
DDP12860	1st Batch - Commissioning & Energization	0		28-Nov-14		12-Dec-14*	0%														
DDP12870	2nd Batch - CLP Installation & Commissioning	95	15-Oct-14	05-Feb-15	02-Jul-14A	21-Nov-14	95%														
DDP12880	FS Installation by JV	24	09-Jan-15	06-Feb-15	20-Sep-14A	15-Oct-14A	100%														
DDP12890	2nd Batch - Noise Measurement (to be clarified)	6	06-Feb-15	12-Feb-15	21-Nov-14A	21-Nov-14A	100%														
DDP12900	Final FS Installation by JV	6	06-Feb-15	12-Feb-15	22-Nov-14	28-Nov-14	0%														
DDP12910	FSD inspection for 2nd Transformer Energization	6	13-Feb-15	18-Feb-15	29-Nov-14	04-Dec-14	0%														
DDP12920	2nd Batch - Commissioning & Energization	0		18-Feb-15		04-Dec-14*	0%														
North Surface works for TBM Tunnelling																					
Design Submission																					
(D1) IFA for Temp. Access to Portion N8A, N8B & N8C incl. Temp. Lighting																					
AP01500	Preparation of AIP Temporary Access Road to N8	33	02-Jan-14	15-Feb-14	02-Jan-14A	18-Nov-14	94%														
AP01505	Review & Comment by JV	12	17-Feb-14	01-Mar-14	19-Nov-14	02-Dec-14	0%														
AP01510	Designer Prepare IFA	6	03-Mar-14	08-Mar-14	03-Dec-14	09-Dec-14	0%														
AP01515	Formal Submission of IFA to ICE/IPs	0		08-Mar-14		09-Dec-14	0%														
AP01520	Advanced Submission of IFA to SO	0		08-Mar-14		09-Dec-14	0%														
AP01525	Review & Comment by SO/ICE/IPs	28	09-Mar-14	05-Apr-14	10-Dec-14	06-Jan-15	0%														
AP01530	Advance Comments from SO/ Comments from ICE/ IPs Received	0		07-Apr-14		06-Jan-15	0%														
AP01535	Designer to Prepare RTC & Updated AIP	18	07-Apr-14	30-Apr-14	07-Jan-15	27-Jan-15	0%														
AP01540	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)	0		30-Apr-14		27-Jan-15	0%														
AP01545	Reply to IPs Comments in RTC	0		30-Apr-14		27-Jan-15	0%														
AP01550	ICE Approval & Issue of Design Check Cert.	18	02-May-14	23-May-14	28-Jan-15	17-Feb-15	0%														
AP01555	Check Cert to SO	0		23-May-14		17-Feb-15	0%														
AP01560	No Objection or Further Minor Comments from IPs Received	0		23-May-14		17-Feb-15	0%														
AP01565	SO Review (35 Days)	35	02-May-14	05-Jun-14	01-Feb-15	07-Mar-15	0%														
Method Statement Submission																					
Method Statement of Cross Passage Construction Methodology of Ground Improvement																					

■ Planned Bar
■ Planned Bar
◆ Planned Milestone
■ Progress bar
◆ Progress Milestone



Date	Revision	Checked	Approved
21-Feb-14	TMCLK/DBJ/GEN/PR...	SPA	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015							
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
MS1240	ICE Approval & Issue Check Cert.	18	17-Sep-14	09-Oct-14	01-Aug-14A	20-Aug-14A	100%													
MS1250	SO's Review	28	17-Sep-14	14-Oct-14	01-Aug-14A	31-Aug-14A	100%													
MS1260	SO's Approval	0		14-Oct-14		31-Aug-14A	100%													
Construction																				
Zone E																				
A6416440	Zone E - Break-in Plug - CSM	38	18-Sep-14	03-Nov-14	01-Sep-14A	18-Nov-14	95%													
A6416450	Zone E - Jet grouting	60	04-Nov-14	15-Jan-15	03-Sep-14A	24-Jan-15	9%													
Zone D1																				
NRC13950	Zone D1 - Vibro-compaction (CH255 to 305)	60	13-May-14	11-Jul-14	25-Aug-14A	19-Sep-14A	100%													
NRC13960	Zone D1 - Vibro-compaction (CH305 to 355)	60	17-May-14	15-Jul-14	20-Aug-14A	27-Sep-14A	100%													
NRC14000	Zone D1 - Compacted Sand Excavation down to +2.0mPD	6	07-Jul-14	12-Jul-14	18-Sep-14A	25-Oct-14A	100%													
NRC14010	Zone D1 - Unreinforced Separation D-wall (1st 55m) (deleted)	16	14-Jul-14	31-Jul-14	29-Sep-14A	29-Sep-14A	100%													
NRC14012	Zone D1 - Unreinforced Separation D-wall (Remaining) (deleted)	19	01-Aug-14	22-Aug-14	29-Sep-14A	29-Sep-14A	100%													
NRC14015	Zone D1 - Ground Treatment at TBM Tunnel Crown	61	22-Sep-14	03-Dec-14	27-Oct-14A	27-Oct-14A	100%													
NRC14020	Zone D1 - Ground Treatment for CP54	20	14-Jul-14	05-Aug-14	02-Sep-14A	20-Nov-14	59%													
NRC14030	Zone D1 - Granular Material for B/Cement Base	6	23-Aug-14	29-Aug-14	18-Oct-14A	21-Oct-14A	100%													
NRC14040	Zone D1 - Compacted Granular Material to +6.0mPD	6	30-Aug-14	05-Sep-14	22-Oct-14A	24-Oct-14A	100%													
Zone D2																				
NRC13970	Zone D2 - Vibro-compaction (CH355 to 405)	60	25-May-14	23-Jul-14	18-Sep-14A	18-Oct-14A	100%													
NRC13980	Zone D2 - Vibro-compaction (CH405 to 443)	60	07-Jun-14	05-Aug-14	15-Oct-14A	28-Oct-14A	100%													
NRC13990	Zone D2 - Unreinforced Separation D-wall (deleted)	21	23-Aug-14	17-Sep-14	29-Sep-14A	29-Sep-14A	100%													
NRC14110	Zone D2 - B/C Slurry Substitution for CP53	22	06-Aug-14	30-Aug-14	21-Nov-14	16-Dec-14	0%													
Zone C1																				
NRC1202100	Zone C1 - Vibro-compaction (CH355 to 405) (deleted)	60	22-Jun-14	20-Aug-14	28-Sep-14A	29-Sep-14A	100%													
NRC1202110	Zone C1 - Vibro-compaction (CH405 to 443) (deleted)	60	28-Jun-14	26-Aug-14	28-Sep-14A	29-Sep-14A	100%													
NRC1202120	Zone C1 - Unreinforced Separation D-wall (deleted)	27	27-Aug-14	27-Sep-14	29-Sep-14A	29-Sep-14A	100%													
NRC1202130	Zone C1 - B/C Slurry Substitution for CP52	26	27-Aug-14	26-Sep-14	17-Nov-14	16-Dec-14	0%													
Zone C2																				
NRC1202140	Zone C2 - Unreinforced Separation D-wall (deleted)	15	09-Aug-14	26-Aug-14	29-Sep-14A	29-Sep-14A	100%													
NRC1202150	Zone C2 - Drilling for Rock Fissure Grouting for CP51	21	03-Jul-14	26-Jul-14	06-Nov-14A	08-Dec-14	11%													
NRC1202155	Zone C2 - Rock Fissure Grouting for CP51	44	14-Jul-14	02-Sep-14	17-Nov-14	09-Jan-15	0%													
NRC1202160	Zone C2 - Jet Grouting for CP51	18	20-Aug-14	10-Sep-14	24-Dec-14	16-Jan-15	0%													
Zone B																				
A6415895	Zone B - Unreinforced Separation D-wall	13	27-Aug-14	11-Sep-14	02-Dec-14	16-Dec-14	0%													
A6415897	Zone B - Unreinforced Separation D-wall	13	25-Jul-14	08-Aug-14	17-Nov-14	01-Dec-14	0%													
A6415900	Zone B - Slurry Wall for TBM Break-out Plug	34	02-Dec-14	13-Jan-15	27-Feb-15	11-Apr-15	0%													
A6415910	Zone B - Slurry Wall - Toe Grouting	24	14-Jan-15	10-Feb-15	13-Apr-15	11-May-15	0%													
A6415920	Zone B - Ground Treatment for TBM Break-out Plug	58	11-Feb-15	30-Apr-15	12-May-15	21-Jul-15	0%													
Ground Treatment																				
A6417430	Zone A - B/C Slurry Substitution for CP49	30	22-Oct-14	25-Nov-14	24-Jan-15	06-Mar-15	0%													
A6417440	Zone A - Drilling for Rock Fissure Grouting for CP48	65	11-Nov-14	28-Jan-15	13-Feb-15	12-May-15	0%													
A6417450	Zone A - Rock Fissure Grouting for CP48	90	25-Nov-14	19-Mar-15	06-Mar-15	26-Jun-15	0%													
A6417460	Zone A - Jet Grouting for CP48	72	29-Jan-15	05-May-15	13-May-15	07-Aug-15	0%													
North Approach TBM Tunnelling & Cross Passage																				
Major Procurement																				
TBM at Northern Landfall																				
PO103080	S880 - 17.6m dia - TBM - Manufacturing - Cutterhead	198	25-Jan-14	30-Sep-14	25-Jan-14A	09-Dec-14	90%													
PO103150	S880 - 17.6m dia - TBM - Workshop Assembly	138	07-May-14	20-Oct-14	04-Jun-14A	09-Dec-14	93%													
PO103160	S880 - 17.6m dia - TBM - Workshop Acceptance Test	0		20-Oct-14		30-Oct-14A	100%													
PO103170	S880 - 17.6m dia - TBM - Disassembly and Packing for Transport	32	21-Oct-14	26-Nov-14	01-Nov-14A	19-Dec-14	72%													
PO103180	S880 - 17.6m dia - TBM - Delivery	10	27-Nov-14	08-Dec-14	20-Dec-14	03-Jan-15	0%													
PO103190	S880 - 17.6m dia - TBM - Arrival to site	0		08-Dec-14		03-Jan-15	0%													
PO103220	S882 - 13.6m dia - TBM - Manufacturing - Cutterhead	198	01-Mar-14	30-Oct-14	01-Mar-14A	20-Nov-14	98%													
PO103290	S882 - 13.6m dia - TBM - Workshop Assembly	150	16-Jun-14	11-Dec-14	16-Jun-14A	11-Dec-14	85%													
PO103300	S882 - 13.6m dia - TBM - Workshop Acceptance Test	0		11-Dec-14		11-Dec-14	0%													
PO103310	S882 - 13.6m dia - TBM - Disassembly and Packing for Transport	28	12-Dec-14	16-Jan-15	12-Dec-14	16-Jan-15	0%													
PO103320	S882 - 13.6m dia - TBM - Delivery	17	17-Jan-15	02-Feb-15	17-Jan-15	02-Feb-15	0%													
PO103330	S882 - 13.6m dia - TBM - Arrival to site	0		02-Feb-15		02-Feb-15	0%													
Precast Segment																				
QSPSC Accreditation for Batching plant																				
A6417790	2nd Batching Plant - QSPSC Approval	0		30-Aug-14		29-Sep-14A	100%													
Precast Segment Mould Fabrication																				
A6417900	ID12.40 Segment Mould - Mould Assembling	30	23-Jun-14	26-Jul-14	19-Jun-14A	25-Oct-14A	100%													
A6417910	ID12.40 Segment Mould - Painting & Commissioning	4	28-Jul-14	31-Jul-14	24-Jun-14A	28-Oct-14A	100%													
Precast Segment ID15.60 - Production for NB North TBM Tunnel																				
A6417950	ID15.60 TBM Segment Ring Fabrication - 1 ring per week	18	02-Sep-14	22-Sep-14	06-Sep-14A	23-Sep-14A	100%													
A6417960	ID15.60 TBM Segment Ring Fabrication - 1 ring per day	6	23-Sep-14	29-Sep-14	23-Sep-14A	25-Sep-14A	100%													
A6417970	ID15.60 TBM Segment Ring Fabrication - 2 rings per day	148	30-Sep-14	25-Apr-15	25-Sep-14A	27-Apr-15	23%													
Precast Segment ID12.40 - Production for SB North TBM Tunnel																				

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21-Feb-14	TMCLK/DBJ/GEN/PR...	SPA	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015							
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
DD6390	SO Approval with Condition R received	0		20-Aug-14		18-Dec-14	0%													
DD6420	Works Commencement - Precast mould Shop Drawing start	0	01-Sep-14		17-Nov-14*		0%													
ETWB TCW No 15/2005 - TBM Tunnel Works																				
GEO1210	1st Submission to GEO - ETWB TCW No 15/2005 - TBM Tunnel Works	0		17-Sep-14		09-Mar-15	0%													
GEO1215	1st Submission GEO Review	28	18-Sep-14	15-Oct-14	10-Mar-15	06-Apr-15	0%													
GEO1220	Received GEO Comment	0		15-Oct-14		08-Apr-15	0%													
GEO1225	Prepare Response to Comment	12	16-Oct-14	29-Oct-14	08-Apr-15	21-Apr-15	0%													
GEO1230	2nd Submission to GEO	0		29-Oct-14		21-Apr-15	0%													
GEO1235	2nd GEO Review	28	30-Oct-14	26-Nov-14	22-Apr-15	19-May-15	0%													
(G5) DDA for Cross Passage - Permanent works - incl. Detailed Geotechnical Assessment - North																				
AN1100	Early DDANorth Cross Passage Lining	108	16-Jun-14	23-Oct-14	03-Jul-14A	22-Oct-14A	100%													
AN1110	Early DDANorth TBM Tunnel Design at CP opening	108	16-Jun-14	23-Oct-14	03-Jul-14A	22-Oct-14A	100%													
DD67438	Preparation of DDACross Passage incl. Detailed Geotechnical Assessment	0	24-Oct-14	24-Oct-14	22-Oct-14A	22-Oct-14A	100%													
DD67448	Review & Comment by JV	6	24-Oct-14	30-Oct-14	22-Oct-14A	29-Oct-14A	100%													
DD67450	Designer prepare DDA	12	31-Oct-14	13-Nov-14	30-Oct-14A	21-Nov-14	75%													
DD67458	Formal Submission of DDA to ICE/ IPs	0		13-Nov-14		21-Nov-14	0%													
DD67460	Advanced Submission to SO	0		13-Nov-14		21-Nov-14	0%													
DD67468	IPs/ SO's Advance Comments/ ICE Comments	28	14-Nov-14	11-Dec-14	22-Nov-14	19-Dec-14	0%													
DD67470	Comments Received	0		11-Dec-14		19-Dec-14	0%													
DD67478	Designer to Reply RTC + Update Submission	21	12-Dec-14	08-Jan-15	20-Dec-14	16-Jan-15	0%													
DD67488	Submit Updated DDA to SO/ ICE/ IPs	0	09-Jan-15		17-Jan-15		0%													
DD67498	ICE Approval & Issue Check Cert	12	09-Jan-15	22-Jan-15	17-Jan-15	30-Jan-15	0%													
DD67508	Submit ICE Check Cert to SO	6	23-Jan-15	29-Jan-15	31-Jan-15	06-Feb-15	0%													
DD67518	IPs Review	28	09-Jan-15	05-Feb-15	17-Jan-15	13-Feb-15	0%													
DD67528	IPs No Objection Received	0		05-Feb-15		13-Feb-15	0%													
DD67609*	SO's Review	35	09-Jan-15	12-Feb-15	17-Jan-15	20-Feb-15	0%													
DD67610	SO Approval with Condition R received	0		12-Feb-15		26-Feb-15	0%													
(H2) DDA Temp. works for Cross Passages - North																				
DD06050	ICE Approval & Issue Check Cert	12	04-Aug-14	16-Aug-14	11-Sep-14A	25-Sep-14A	100%													
DD06060	Submit ICE Check Cert to SO	6	18-Aug-14	23-Aug-14	26-Sep-14A	03-Oct-14A	100%													
DD06070	IPs Review	28	03-Aug-14	30-Aug-14	29-Aug-14A	10-Oct-14A	100%													
DD06080	IPs No Objection Received	0		30-Aug-14		10-Oct-14A	100%													
DD06120	SO's Review	35	02-Aug-14	05-Sep-14	29-Aug-14A	18-Nov-14	94%													
DD06130	SO Approval with Condition R received	0		05-Sep-14		18-Nov-14	0%													
ETWB TCW No 15/2005 - Cross Passage Ground Treatment for TBM Tunnels in North Landfall																				
GEO1236	Review Meeting with GEO - after AIP Approval	0	01-Apr-14		17-Nov-14		0%													
GEO1240	1st Submission to GEO - ETWB TCW No 15/2005 - Cross Passage Ground Treatment for TBM Tunnels in North Landfall	0		04-Aug-14		17-Nov-14	0%													
GEO1245	1st Submission GEO Review	28	04-Aug-14	31-Aug-14	17-Nov-14	14-Dec-14	0%													
GEO1250	Received GEO Comment	0		01-Sep-14		15-Dec-14	0%													
GEO1255	Prepare Response to Comment	12	01-Sep-14	15-Sep-14	15-Dec-14	30-Dec-14	0%													
GEO1260	2nd Submission to GEO	0		15-Sep-14		30-Dec-14	0%													
GEO1265	2nd GEO Review	28	16-Sep-14	13-Oct-14	31-Dec-14	27-Jan-15	0%													
GEO1455	Received 2nd GEO Comment	0		13-Oct-14		27-Jan-15	0%													
GEO1465	Prepare Respond to 2nd Comment	12	14-Oct-14	27-Oct-14	28-Jan-15	10-Feb-15	0%													
GEO1475	3rd Submission to GEO	0		27-Oct-14		10-Feb-15	0%													
GEO1485	3rd GEO Review	28	28-Oct-14	24-Nov-14	11-Feb-15	10-Mar-15	0%													
Method Statement Submission																				
Method Statement of Construction Methodology of Cross Passage Excavation																				
MS1400	Preparation Method Statement for CP Excavation	25	03-Jan-15	31-Jan-15	03-Mar-15	31-Mar-15	0%													
MS1410	Submit Method Statement to SO	0		31-Jan-15		31-Mar-15	0%													
MS1420	SO Reviews & Comments	28	01-Feb-15	28-Feb-15	01-Apr-15	28-Apr-15	0%													
Construction																				
Northern Landfall Surface Setup for TBM operation																				
A6415930	Gantry Setup at North TBM Launching Shaft	48	29-Jul-14	23-Sep-14	23-Jan-15	26-Mar-15	0%													
A6415937	Slurry Treatment Plant Foundation	25	15-Oct-14	12-Nov-14	17-Jan-15	14-Feb-15	0%													
A6415940	Slurry Treatment Plant Setup at Northern Landfall	64	13-Nov-14	29-Jan-15	16-Feb-15	13-May-15	0%													
A6415950	Slurry Treatment Plant Commissioning	24	30-Jan-15	05-Mar-15	14-May-15	11-Jun-15	0%													
S880 TBM Assembly at North TBM Launching Shaft																				
NSH1900	S880 - TBM Launching - Front Shield Assembly	3	09-Dec-14	11-Dec-14	27-Mar-15	29-Mar-15	0%													
NSH1910	S880 - TBM Launching - Cutterhead Assembly	3	12-Dec-14	14-Dec-14	30-Mar-15	01-Apr-15	0%													
NSH1920	S880 - TBM Launching - Erector Assembly	3	15-Dec-14	17-Dec-14	02-Apr-15	07-Apr-15	0%													
NSH1930	S880 - TBM Launching - Tail Skin Assembly	3	18-Dec-14	20-Dec-14	08-Apr-15	10-Apr-15	0%													
NSH1940	S880 - TBM Launching - Main Drive Connection	2	21-Dec-14	22-Dec-14	11-Apr-15	12-Apr-15	0%													
NSH1950	S880 - TBM Launching - Main Drive Shifting	2	23-Dec-14	24-Dec-14	13-Apr-15	14-Apr-15	0%													
NSH1960	S880 - TBM Launching - Main Drive Thrust Frame Installation	14	25-Dec-14	07-Jan-15	15-Apr-15	28-Apr-15	0%													
NSH1965	S880 - TBM Launching - Gantry 2 Assembly	3	25-Dec-14	27-Dec-14	15-Apr-15	17-Apr-15	0%													
NSH1970	S880 - TBM Launching - Gantry 1 Assembly	3	28-Dec-14	30-Dec-14	18-Apr-15	20-Apr-15	0%													
NSH1980	S880 - TBM Launching - Gantry 1 & Main Drive connection	3	08-Jan-15	10-Jan-15	29-Apr-15	01-May-15	0%													
NSH1990	S880 - TBM Launching - Gantry 2 & Gantry 1 connection	3	11-Jan-15	13-Jan-15	02-May-15	04-May-15	0%													

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Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014						2015						
								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		
GS00980	SO's Comments for 1st Submission	35	24-Jun-14	28-Jul-14	19-Nov-14	23-Dec-14	0%													
GS00990	Prepare Re-submission	10	29-Jul-14	08-Aug-14	24-Dec-14	07-Jan-15	0%													
GS00992	*2nd Submission	0		08-Aug-14		07-Jan-15	0%													
GS00994	SO's Condition Approval	35	09-Aug-14	12-Sep-14	08-Jan-15	11-Feb-15	0%													
(A17) Instrumentation & Monitoring Plan for CLPP Submarine Cable																				
GS01900	Preparation of Instrumentation and Monitoring Plan for CLPP Submarine Cable	20	02-May-14	26-May-14	09-Jun-14A	16-Oct-14A	100%													
GS01905	1st Submission	0		26-May-14		16-Oct-14A	100%													
GS01910	CLPS Comment	28	27-May-14	23-Jun-14	16-Oct-14A	16-Oct-14A	100%													
GS01915	CLP Comment Received	0		23-Jun-14		16-Oct-14A	100%													
GS01920	SO's Comments for 1st Submission	35	27-May-14	30-Jun-14	16-Oct-14A	16-Oct-14A	100%													
GS01925	Prepare Re-submission	6	02-Jul-14	08-Jul-14	16-Oct-14A	16-Oct-14A	100%													
GS01930	2nd Submission	0		08-Jul-14		16-Oct-14A	100%													
GS01935	ICE Cert. Issue	6	09-Jul-14	15-Jul-14	16-Oct-14A	16-Oct-14A	100%													
GS01957	CLPS Comment	28	09-Jul-14	05-Aug-14	16-Oct-14A	16-Oct-14A	100%													
GS01958	CLP Comment Received	0		05-Aug-14		16-Oct-14A	100%													
GS01960	SO's Condition Approval	35	09-Jul-14	12-Aug-14	16-Oct-14A	16-Oct-14A	100%													
(B6) Risk Assessment of Submarine Cable - Tunnelling Works																				
GS01400	Preparation of Risk Assessment of Submarine cables - Tunnelling Works	24	12-Dec-14	12-Jan-15	26-Feb-15	25-Mar-15	0%													
GS01405	1st Submission	0		12-Jan-15		25-Mar-15	0%													
GS01410	SO's Comments for 1st Submission	35	13-Jan-15	16-Feb-15	26-Mar-15	29-Apr-15	0%													
GS01420	CLP Review (4 weeks)	28	16-Jan-15	12-Feb-15	29-Mar-15	25-Apr-15	0%													
GS01425	CLP Comment Received	0		12-Feb-15		25-Apr-15	0%													
GS01430	Prepare Re-submission	12	17-Feb-15	09-Mar-15	30-Apr-15	14-May-15	0%													
(G1) IFA for Structural Health Monitoring System for TBM Tunnel																				
DD71000	IPs/ SO's Advance Comments/ ICE Comments	28	08-Apr-14	05-May-14	14-Jun-14A	18-Nov-14	93%													
DD71010	Designer to Reply RTC + Update Submission	21	07-May-14	30-May-14	19-Nov-14	08-Dec-14	0%													
DD71020	Submit Updated IFA to SO/ ICE/ IPs	0	31-May-14		09-Dec-14		0%													
DD71030	ICE Approval & Issue Check Cert	12	31-May-14	14-Jun-14	13-Jun-14A	10-Dec-14	80%													
DD71040	Submit ICE Check Cert to SO	6	16-Jun-14	21-Jun-14	11-Dec-14	17-Dec-14	0%													
DD71050	IPs Review	28	31-May-14	27-Jun-14	09-Dec-14	05-Jan-15	0%													
DD71060	IPs No Objection Received	0		27-Jun-14		05-Jan-15	0%													
DD71070	SO's Review	35	31-May-14	04-Jul-14	09-Dec-14	12-Jan-15	0%													
DD71080	SO Approval with Condition R received	0		04-Jul-14		12-Jan-15	0%													
DD71200	TBM Segment Mould Acceptance & Trial	0	11-Jul-14		13-Jan-15		0%													
(G1) DDA for TBM Tunnel Lining Structural Design - Sub-sea tunnel																				
DD6520	IPs/ SO's Advance Comments/ ICE Comments	28	23-Apr-14	20-May-14	16-Aug-14A	13-Oct-14A	100%													
DD6525	Comments Received	0		20-May-14		13-Oct-14A	100%													
DD6530	Designer to Reply RTC + Update Submission	50	03-Jun-14	31-Jul-14	13-Oct-14A	17-Oct-14A	100%													
DD6540	Submit Updated DDA to SO/ ICE/ IPs (incorporate CPOpening details)	0	01-Aug-14		17-Oct-14A		100%													
DD6550	ICE Approval & Issue Check Cert	12	01-Aug-14	14-Aug-14	11-Aug-14A	18-Sep-14A	100%													
DD6560	Submit ICE Check Cert to SO	6	15-Aug-14	21-Aug-14	19-Sep-14A	30-Sep-14A	100%													
DD6570	IPs Review	28	01-Aug-14	28-Aug-14	17-Oct-14A	11-Nov-14A	100%													
DD6580	IPs No Objection Received	0		28-Aug-14		11-Nov-14A	100%													
DD6630	SO's Review	35	01-Aug-14	04-Sep-14	17-Oct-14A	11-Nov-14A	100%													
DD6640	SO Approval with Condition R received	0		04-Sep-14		11-Nov-14A	100%													
DD6660	Sub-sea TBM Tunnel Segment - Precast Mould Fabrication	24	05-Sep-14	06-Oct-14	12-Nov-14A	03-Dec-14	38%													
DD6670	Sub-sea TBM Tunnel Segment - Fabrication	265	07-Oct-14	31-Aug-15	04-Dec-14	31-Oct-15	0%													
(G1) DDA for TBM Tunnel Lining Settlement Analysis & Confinement Pressure - Sub-sea tunnel																				
AN1150	DDA Settlement Analysis & Confinement Pressure for Sub-sea Tunnel	246	21-Nov-13	24-Sep-14	21-Nov-13A	20-Nov-14	98%													
DD6690	Preparation of DDATBM Confinement - Sub-sea tunnel	0	25-Sep-14	25-Sep-14	21-Nov-14	21-Nov-14	0%													
DD6700	Review & Comment by JV	12	25-Sep-14	10-Oct-14	21-Nov-14	04-Dec-14	0%													
DD6705	Designer prepare DDA	12	11-Oct-14	24-Oct-14	05-Dec-14	18-Dec-14	0%													
DD6710	Formal Submission of DDA to ICE/ IPs	0		24-Oct-14		18-Dec-14	0%													
DD6715	Advanced Submission to SO	0		24-Oct-14		18-Dec-14	0%													
DD6720	IPs/ SO's Advance Comments/ ICE Comments	28	25-Oct-14	21-Nov-14	19-Dec-14	15-Jan-15	0%													
DD67258	Comments Received	0		21-Nov-14		15-Jan-15	0%													
DD6730	Designer to Reply RTC + Update Submission	21	22-Nov-14	16-Dec-14	16-Jan-15	09-Feb-15	0%													
DD6740	Submit Updated DDA to SO/ ICE/ IPs	0	17-Dec-14		10-Feb-15		0%													
DD6750	ICE Approval & Issue Check Cert	12	17-Dec-14	02-Jan-15	10-Feb-15	02-Mar-15	0%													
DD6760	Submit ICE Check Cert to SO	6	03-Jan-15	09-Jan-15	03-Mar-15	09-Mar-15	0%													
DD6770	IPs Review	28	17-Dec-14	13-Jan-15	10-Feb-15	09-Mar-15	0%													
DD6780	IPs No Objection Received	0		13-Jan-15		09-Mar-15	0%													
DD6830	SO's Review	35	17-Dec-14	20-Jan-15	10-Feb-15	16-Mar-15	0%													
DD6840	SO Approval with Condition R received	0		20-Jan-15		16-Mar-15	0%													
(G3) DDA for TBM Tunnel Internal Structures (Sub-sea)																				
DD00905	Review & Comment by JV	14	25-Aug-14	10-Sep-14	28-Aug-14A	15-Nov-14A	100%													
DD00910	Designer prepare DDA	12	11-Sep-14	24-Sep-14	15-Nov-14A	21-Nov-14A	100%													
DD00915	Formal Submission of DDA to ICE/ IPs	0		24-Sep-14		21-Nov-14A	100%													
DD00920	Advanced Submission to SO	0		24-Sep-14		21-Nov-14A	100%													

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Date	Revision	Checked	Approved
21-Feb-14	TMCLK/DBJ/GEN/PR...	SPa	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015							
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
DD00925	IPs/ SO's Advance Comments/ ICE Comments	28	25-Sep-14	22-Oct-14	21-Nov-14A	13-Dec-14	4%													
DD00930	Comments Received	0		22-Oct-14		13-Dec-14	0%													
DD00935	Designer to Reply RTC + Update Submission	21	23-Oct-14	15-Nov-14	15-Dec-14	10-Jan-15	0%													
DD00940	Submit Updated DDA to SO/ ICE/ IPs	0	17-Nov-14			12-Jan-15	0%													
DD00945	ICE Approval & Issue Check Cert	12	17-Nov-14	29-Nov-14	12-Jan-15	24-Jan-15	0%													
DD00950	Submit ICE Check Cert to SO	6	01-Dec-14	06-Dec-14	26-Jan-15	31-Jan-15	0%													
DD00955	IPs Review	28	17-Nov-14	14-Dec-14	12-Jan-15	08-Feb-15	0%													
DD00960	IPs No Objection Received	0		14-Dec-14		08-Feb-15	0%													
DD00980	SO's Review	35	17-Nov-14	21-Dec-14	12-Jan-15	15-Feb-15	0%													
DD00985	SO Approval with Condition R received	0		22-Dec-14		16-Feb-15	0%													
DD00995	Sub-sea Internal Structure - Precast Gallery Mould Design & Fabrication	24	22-Dec-14	21-Jan-15	16-Feb-15	21-Mar-15	0%													
DD01015	Sub-sea Tunnel - Precast Gallery Fabrication	244	22-Jan-15	21-Nov-15	23-Mar-15	16-Jan-16	0%													
Sub-sea Tunnel Cross Passage & Internal Structure																				
Design Submission																				
(G4) AIP - Cross Passage - Permanent works - Sub-sea tunnel																				
AP00485	SO Approval with Condition R received	0		22-Sep-14		02-Jul-14A	100%													
(G4) DDA for Cross Passage - Permanent works - incl. Geotechnical Assessment - Sub-sea tunnel																				
AN1175	Lab Test Result from Phase 2 GI	0		01-Dec-14		01-Dec-14*	0%													
AN1180	Early DDASub-sea Cross Passage Lining & CP Opening	151	03-Jun-14	29-Nov-14	03-Jun-14A	29-Nov-14	92%													
DD01100	Preparation of DDACross Passage incl. Detailed Geotechnical Assessment	0	01-Dec-14	01-Dec-14	01-Dec-14	01-Dec-14	0%													
DD01105	Review & Comment by JV	6	01-Dec-14	06-Dec-14	01-Dec-14	06-Dec-14	0%													
DD01110	Designer prepare DDA	12	08-Dec-14	20-Dec-14	08-Dec-14	20-Dec-14	0%													
DD01115	Formal Submission of DDA to ICE/ IPs	0		20-Dec-14		20-Dec-14	0%													
DD01120	Advanced Submission to SO	0		20-Dec-14		20-Dec-14	0%													
DD01125	IPs/ SO's Advance Comments/ ICE Comments	28	21-Dec-14	17-Jan-15	21-Dec-14	17-Jan-15	0%													
DD01130	Comments Received	0		17-Jan-15		17-Jan-15	0%													
DD01135	Designer to Reply RTC + Update Submission	21	19-Jan-15	11-Feb-15	19-Jan-15	11-Feb-15	0%													
DD01140	Submit Updated DDA to SO/ ICE/ IPs	0	12-Feb-15			12-Feb-15	0%													
DD01145	ICE Approval & Issue Check Cert	12	12-Feb-15	04-Mar-15	12-Feb-15	04-Mar-15	0%													
DD01155	IPs Review	28	12-Feb-15	11-Mar-15	12-Feb-15	11-Mar-15	0%													
DD01180	SO's Review	35	12-Feb-15	18-Mar-15	12-Feb-15	18-Mar-15	0%													
(H1) DDA Temp.works for Cross Passages - Sub-sea tunnel (Type A)																				
AN1210	DDACP Freezing design (Structural & thermal analysis of the ice ring)	176	25-Jul-14	28-Feb-15	18-Jun-14A	27-Dec-14	81%													
DD05000	Preparation of DDACross Passages Ground Freezing (Type A)	18	02-Mar-15	21-Mar-15	29-Dec-14	19-Jan-15	0%													
DD05010	Review & Comment by JV	18	23-Mar-15	16-Apr-15	20-Jan-15	09-Feb-15	0%													
DD05020	Designer prepare DDA	10	17-Apr-15	28-Apr-15	10-Feb-15	27-Feb-15	0%													
DD05030	Formal Submission of DDA to ICE/ IPs	0		28-Apr-15		27-Feb-15	0%													
DD05040	Advanced Submission to SO	0		28-Apr-15		27-Feb-15	0%													
Method Statement Submission																				
Method Statement of Cross Passage Ground Freezing																				
MS1300	Preparation Method Statement for CP Ground Freezing	25	17-Sep-14	17-Oct-14	17-Nov-14	15-Dec-14	0%													
MS1310	Submit Method Statement to SO/ ICE	0		17-Oct-14		15-Dec-14	0%													
MS1320	SO Reviews & Comments/ ICE Comments	28	18-Oct-14	14-Nov-14	16-Dec-14	12-Jan-15	0%													
MS1330	Re-submission	18	15-Nov-14	05-Dec-14	13-Jan-15	02-Feb-15	0%													
MS1340	ICE Approval & Issue Check Cert.	18	06-Dec-14	29-Dec-14	03-Feb-15	02-Mar-15	0%													
MS1350	SO's Review	28	06-Dec-14	02-Jan-15	03-Feb-15	02-Mar-15	0%													
MS1360	SO's Approval	0		02-Jan-15		02-Mar-15	0%													
Southern Landfall																				
South Retrieval Shaft																				
Design Submission																				
(A4) Additional Ground Investigation Plan - Phase 3 - Southen Landfall																				
GS2870	Preparation of Additional Ground Investigation (Phase 3)	11	15-Jan-15	27-Jan-15	15-Jan-15*	27-Jan-15	0%													
GS2880	1st Submission	0		27-Jan-15		27-Jan-15	0%													
GS2905	SO's Comments for 1st Submission	35	28-Jan-15	03-Mar-15	28-Jan-15	03-Mar-15	0%													
(B5) AIP Construction Risk Assessment - Impact on South Landfall																				
GS01200	Preparation of Construction Risk Assessment - Impact on South Landfall	36	30-Oct-14	10-Dec-14	13-Jun-15	27-Jul-15	0%													
GS01205	1st Submission	0		10-Dec-14		27-Jul-15	0%													
GS01210	SO's Comments for 1st Submission	35	11-Dec-14	14-Jan-15	28-Jul-15	31-Aug-15	0%													
GS01215	Prepare Re-submission	10	15-Jan-15	26-Jan-15	01-Sep-15	11-Sep-15	0%													
GS01220	2nd Submission	0		26-Jan-15		11-Sep-15	0%													
GS01225	ICE Cert. Issue	6	27-Jan-15	02-Feb-15	12-Sep-15	18-Sep-15	0%													
GS01250	SO's Condition Approval	35	27-Jan-15	02-Mar-15	12-Sep-15	16-Oct-15	0%													
(F1) AIP Temp.works - Retrieval Shaft on Southern Landfall incl. break-out																				
AP01600	Preparation of AIP Retrieval Shaft on Sth Landfall incl break out	12	25-Sep-14	11-Oct-14	18-Mar-15	01-Apr-15	0%													
AP01605	Review & Comment by JV	12	11-Oct-14	25-Oct-14	01-Apr-15	20-Apr-15	0%													
AP01610	Designer Prepare AIP	6	25-Oct-14	01-Nov-14	20-Apr-15	27-Apr-15	0%													
AP01615	Formal Submission of AIP to ICE/IPs	0		01-Nov-14		27-Apr-15	0%													
AP01620	Advanced Submission of AIP to SO	0		01-Nov-14		27-Apr-15	0%													
AP01625	Review & Comment by SO/ ICE/ IPs	28	01-Nov-14	29-Nov-14	27-Apr-15	25-May-15	0%													

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Date	Revision	Checked	Approved
21-Feb-14	TMCLK/DBJ/GEN/PR...	SPA	WYu

Activity ID	Activity Name	Orig Dur	Planned Start	Planned Finish	Current Start	Current Finish	14W47 % Comp	2014					2015				
								Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
AP01630	Advance Comments from SO/ Comments from ICE/ IPs Received	0		29-Nov-14		26-May-15	0%										
AP01635	Designer to Prepare RTC & Updated AIP	18	29-Nov-14	20-Dec-14	26-May-15	15-Jun-15	0%										
AP01640	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)	0		20-Dec-14		15-Jun-15	0%										
AP01645	Reply to IPs Comments in RTC	0		20-Dec-14		15-Jun-15	0%										
AP01650	ICE Approval & Issue of Design Check Cert.	18	20-Dec-14	14-Jan-15	16-Jun-15	08-Jul-15	0%										
AP01655	Check Cert to SO	0		14-Jan-15		08-Jul-15	0%										
AP01660	No Objection or Further Minor Comments from IPs Received	0		14-Jan-15		08-Jul-15	0%										
AP01680	SO Review (35 Days)	35	22-Dec-14	26-Jan-15	16-Jun-15	20-Jul-15	0%										
AP01685	SO Approval with Condition R received	0		26-Jan-15		20-Jul-15	0%										
(F2) AIP Temp works of Ground Treatment for TBMs passing under Southern Landfall																	
AP01905	Review & Comment by JV	18	23-Sep-14	15-Oct-14	06-May-15	27-May-15	0%										
AP01910	Designer Prepare AIP	12	16-Oct-14	29-Oct-14	28-May-15	10-Jun-15	0%										
AP01915	Formal Submission of AIP to ICE/IPs	0		29-Oct-14		10-Jun-15	0%										
AP01920	Advanced Submission of AIP to SO	0		29-Oct-14		10-Jun-15	0%										
AP01925	Review & Comment by SO/ ICE/ IPs	28	30-Oct-14	26-Nov-14	11-Jun-15	08-Jul-15	0%										
AP01930	Advance Comments from SO/ Comments from ICE/ IPs Received	0		26-Nov-14		08-Jul-15	0%										
AP01935	Designer to Prepare RTC & Updated AIP	18	27-Nov-14	17-Dec-14	09-Jul-15	29-Jul-15	0%										
AP01940	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)	0		17-Dec-14		29-Jul-15	0%										
AP01945	Reply to IPs Comments in RTC	0		17-Dec-14		29-Jul-15	0%										
AP01950	ICE Approval & Issue of Design Check Cert.	18	18-Dec-14	10-Jan-15	30-Jul-15	19-Aug-15	0%										
AP01955	Check Cert to SO	0		10-Jan-15		19-Aug-15	0%										
AP01960	No Objection or Further Minor Comments from IPs Received	0		10-Jan-15		19-Aug-15	0%										
AP01980	SO Review (35 Days)	35	19-Dec-14	22-Jan-15	30-Jul-15	02-Sep-15	0%										
AP01985	SO Approval with Condition R received	0		22-Jan-15		02-Sep-15	0%										
South Cut & Cover Tunnel																	
Design Submission																	
(E2) AIP for South Approach Ramp & C&C Box																	
AP3080	Review & Comment by JV	12	07-Aug-14	21-Aug-14	11-Sep-14 A	19-Sep-14 A	100%										
AP3085	Prepare submission to SO	6	21-Aug-14	28-Aug-14	20-Sep-14A	26-Sep-14A	100%										
AP3090	Formal Submission of AIP to ICE/IPs	0		28-Aug-14		26-Sep-14A	100%										
AP3095	Advanced Submission of AIP to SO	0		28-Aug-14		26-Sep-14A	100%										
AP3100	Review & Comment by SO/ ICE/ IPs	28	28-Aug-14	25-Sep-14	27-Sep-14A	27-Oct-14A	100%										
AP3110	Advance Comments from SO/ Comments from ICE/ IPs Received	0		25-Sep-14		27-Oct-14A	100%										
AP3120	Designer to Prepare RTC & Updated AIP	18	25-Sep-14	18-Oct-14	28-Oct-14A	20-Mar-15	89%										
AP3130	Submission of AIP to SO/ ICE together with Reply To Comment (RTC)	0		18-Oct-14		20-Mar-15	0%										
AP3135	Reply to IPs Comments in RTC	0		18-Oct-14		20-Mar-15	0%										
AP3140	ICE Approval & Issue of Design Check Cert.	18	18-Oct-14	08-Nov-14	26-Sep-14A	23-Mar-15	80%										
AP3150	Check Cert to SO	0		08-Nov-14		23-Mar-15	0%										
AP3170	No Objection or Further Minor Comments from IPs Received	0		08-Nov-14		15-Apr-15	0%										
AP3210	SO Review (35 Days)	35	18-Oct-14	22-Nov-14	23-Mar-15	27-Apr-15	0%										
AP3220	SO Approval with Condition R received	0		22-Nov-14		27-Apr-15	0%										
AP3630	Preparation of AIP for South C&C Box	0			14-Jan-15	27-Jan-15	0%										
AP3640	Review & Comment by JV	0			28-Jan-15	10-Feb-15	0%										
AP3650	Prepare submission to SO	0			11-Feb-15	17-Feb-15	0%										
AP3660	Formal Submission of AIP to ICE/IPs	0				17-Feb-15	0%										
AP3670	Advanced Submission of AIP to SO	0				17-Feb-15	0%										
AP3680	Review & Comment by SO/ ICE/ IPs	0			18-Feb-15	18-Mar-15	0%										
(E2) DDA for South C&C Box & Approach Ramp																	
DD00460	Preparation DDA Stn C&C Box and Approach Ramp	18	22-Nov-14	13-Dec-14	27-Apr-15	19-May-15	0%										
DD00470	Review & Comment by JV	18	13-Dec-14	07-Jan-15	19-May-15	10-Jun-15	0%										
DD00480	Designer prepare DDA	10	07-Jan-15	19-Jan-15	10-Jun-15	23-Jun-15	0%										
DD00490	Formal Submission of DDA to ICE/ IPs	0		19-Jan-15		23-Jun-15	0%										
DD00500	Advanced Submission to SO	0		19-Jan-15		23-Jun-15	0%										
DD00510	IPs/ SO's Advance Comments/ ICE Comments	28	19-Jan-15	16-Feb-15	23-Jun-15	21-Jul-15	0%										
DD00520	Comments Received	0		16-Feb-15		21-Jul-15	0%										
DD00530	Designer to Reply RTC + Update Submission	21	16-Feb-15	19-Mar-15	21-Jul-15	14-Aug-15	0%										
(F3) AIP Temp. Support for South C&C, Portal & ELS																	
DD69590	Prepare AIP South C&C ELS	18	25-Sep-14	18-Oct-14	18-Mar-15	13-Apr-15	0%										
DD69600	Review & Comment by JV	18	18-Oct-14	08-Nov-14	13-Apr-15	05-May-15	0%										
DD69610	Designer prepare AIP	10	08-Nov-14	20-Nov-14	05-May-15	16-May-15	0%										
DD69620	Formal Submission of AIP to ICE/ IPs	0		20-Nov-14		16-May-15	0%										
DD69630	Advanced Submission to SO	0		20-Nov-14		16-May-15	0%										
DD69640	IPs/ SO's Advance Comments/ ICE Comments	28	20-Nov-14	18-Dec-14	16-May-15	13-Jun-15	0%										
DD69650	Comments Received	0		18-Dec-14		13-Jun-15	0%										
DD69660	Designer to Reply RTC + Update Submission	21	18-Dec-14	15-Jan-15	13-Jun-15	10-Jul-15	0%										
DD69670	Submit Updated AIP to SO/ ICE/ IPs	0		15-Jan-15		10-Jul-15	0%										
DD69680	ICE Approval & Issue Check Cert	12	15-Jan-15	29-Jan-15	10-Jul-15	24-Jul-15	0%										
DD69690	IPs Review	28	15-Jan-15	12-Feb-15	10-Jul-15	07-Aug-15	0%										
DD69700	IPs No Objection Received	0		12-Feb-15		07-Aug-15	0%										

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21-Feb-14	TMCLK/DBJ/GEN/PR...	SPA	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	
Air Quality									
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		✓

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	
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		✓
WATER QUALITY									
<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		✓

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	
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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<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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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	✓
ECOLOGY									
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 ² 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		✓
LANDSCAPE AND VISUAL									
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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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
WASTE									
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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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		✓

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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		<>

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		<ul style="list-style-type: none"> f Having a capacity of <450L unless the specifications have been approved by the EPD; and f Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations. f Clearly labelled and used solely for the storage of chemical wastes; f Enclosed with at least 3 sides; 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; f Adequate ventilation; f Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and f Incompatible materials are adequately separated. 							
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

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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		✓
CULTURAL HERITAGE									
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 mg/L ^(a)	<u>Surface and Middle</u> 5.0 mg/L	<u>Surface and Middle</u> 4.2 mg/L
	<u>Bottom</u> 4.7 mg/L	<u>Bottom</u> 3.6 mg/L
Turbidity in NTU (Depth-averaged ^{(b), (c)})	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., 27.5 NTU	130% of upstream control station at the same tide of the same day and 99%-ile of baseline data, i.e., 47.0 NTU
SS in mg/L (Depth-averaged ^{(b), (c)})	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., 23.5 mg/L	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., 34.4 mg/L

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 : 10/10/2014

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) : 1010
 Ta(K) : 301

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.5	3.502	1.688	55	54.48
2	13 holes	10.2	3.164	1.524	50	49.53
3	10 holes	7.1	2.639	1.272	42	41.60
4	7 holes	4.9	2.193	1.057	36	35.66
5	5 holes	2.8	1.658	0.799	28	27.74

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): 30.005 Intercept(b): 3.758 Correlation Coefficient(r): 0.9998

Checked by: Magnum Fan

Date: 14/10/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR10
 Calibrated by : P.F. Yeung
 Date : 10/10/2014

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) : 1010
 Ta(K) : 301

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.2	3.325	1.602	56	55.64
2	13 holes	9.4	3.046	1.468	51	50.67
3	10 holes	7.0	2.629	1.267	44	43.72
4	7 holes	4.8	2.177	1.049	37	36.76
5	5 holes	2.8	1.662	0.801	29	28.81

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): 33.346 Intercept(b): 1.856 Correlation Coefficient(r): 0.9996

Checked by: Magnum Fan

Date: 14/10/14

High-Volume TSP Sampler
5-Point Calibration Record

Location : AQMS1
 Calibrated by : P.F. Yeung
 Date : 10/10/2014

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) : 1010
 Ta(K) : 301

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.6	3.527	1.699	58	57.62
2	13 holes	10.0	3.142	1.514	51	50.67
3	10 holes	7.2	2.666	1.285	43	42.72
4	7 holes	4.9	2.199	1.060	36	35.77
5	5 holes	2.9	1.692	0.816	27	26.83

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): 34.415 Intercept(b): 1.146 Correlation Coefficient(r): 0.9996

Checked by: Magnum Fan

Date: 14/10/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 1
 Calibrated by : P.F.Yeung
 Date : 10/10/2014

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) : 1010
 Ta(K) : 301

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	12.6	3.516	1.694	55	54.48
2 13 holes	9.8	3.101	1.494	48	47.55
3 10 holes	7.0	2.621	1.263	40	39.62
4 7 holes	5.0	2.215	1.067	34	33.68
5 5 holes	2.9	1.687	0.813	26	25.75

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): 32.562 Intercept(b): -1.019 Correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 16/10/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 6
 Calibrated by : P.F.Yeung
 Date : 10/10/2014

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) : 1010
 Ta(K) : 301

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	12.4	3.488	1.681	57	56.46
2 13 holes	9.9	3.117	1.502	50	49.53
3 10 holes	7.2	2.658	1.281	43	42.59
4 7 holes	4.8	2.170	1.046	35	34.67
5 5 holes	2.8	1.659	0.799	25	24.76

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): 31.290 Intercept(b): 3.173 Correlation Coefficient(r): 0.9990

Checked by: Magnum Fan

Date: 14/10/2014

Certificate of Calibration 校正證書

Certificate No. : C143205
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC14-1304)

Date of Receipt / 收件日期 : 19 May 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 : $(23 \pm 2)^{\circ}\text{C}$
Line Voltage / 電壓 : ---

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

TEST SPECIFICATIONS / 測試規範

Calibration check

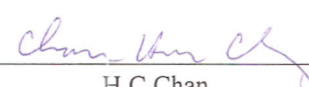
DATE OF TEST / 測試日期 : 26 May 2014

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 : _____
H S Chung
Technician

Certified By : 
核證 : _____
H C Chan
Engineer

Date of Issue : 27 May 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所書面批准。

Certificate of Calibration

校正證書

Certificate No. : C143205
證書編號

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

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

- Test procedure : MA130N.
- Results :

Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.1	1.8	+0.3	0.2	2.0
4.1	4.0	+0.1	0.3	2.0
6.1	6.1	0.0	0.3	2.0
8.2	8.4	-0.2	0.3	2.0
10.1	10.4	-0.3	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。

ENVIROTECH SERVICES CO.

Calibration Report of Wind Meter

Date of Calibration : 29 June 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)
1.2	1.1
2.3	2.5
1.7	1.9

Wind Direction Test

Davis (o)	Marine Compass (o)
271	270
0	0
90	90
181	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, 2014 Rootsmeter S/N 0438320 Ta (K) - 293
 Operator Tisch Orifice I.D. - 2454 Pa (mm) - 758.19

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	1.4740	3.2	2.00
2	NA	NA	1.00	1.0340	6.4	4.00
3	NA	NA	1.00	0.9240	7.9	5.00
4	NA	NA	1.00	0.8820	8.8	5.50
5	NA	NA	1.00	0.7270	12.7	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
1.0103	0.6854	1.4245	0.9958	0.6755	0.8791
1.0061	0.9730	2.0146	0.9916	0.9590	1.2433
1.0040	1.0866	2.2524	0.9895	1.0709	1.3900
1.0028	1.1370	2.3623	0.9884	1.1206	1.4579
0.9976	1.3722	2.8491	0.9832	1.3524	1.7583
Qstd slope (m) = 2.07593			Qa slope (m) = 1.29991		
intercept (b) = -0.00102			intercept (b) = -0.00063		
coefficient (r) = 0.99996			coefficient (r) = 0.99996		
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 }



Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/010 Manufacturer : HACH

Model No. : 2100Q Serial No. : 11110 C 014260

Date of Calibration : 06/10/2014 Due Date : 05/01/2015

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

005/6.1/001/7

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	20.6	3.00
100	102	2.00
800	790	-1.25

(*) 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 : hw

Checked by : 1266

Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/004 Manufacturer : HANNA
 Model No. : HI 8314 Serial No. : 8263193
 Date of Calibration : 07/10/2014 Calibration Due Date : 06/11/2014

Liquid Junction Error

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/001/19
 Temperature of Solution : 20.0 $\Delta\text{pH}_{1/2} = \underline{+0.08}$
 pH value of diluted buffer : 6.79 pH (S) = 6.881
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.09}$ (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.011}$

Shift on Stirring

pH of buffer solution (with stirring), $\text{pH}_s = \underline{6.90}$
 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 : 0.01

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 ΔpH_j	≤ 0.05
Shift on Stirring ΔpH_s	≤ 0.02
Noise ΔpH_n	≤ 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 : 07/11/2014 Calibration Due Date : 06/12/2014

Liquid Junction Error

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/001/20
 Temperature of Solution : 20.0 $\Delta\text{pH}_{1/2} = \underline{+0.08}$
 pH value of diluted buffer : 6.79 pH (S) = 6.881
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.091}$ (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.011}$

Shift on Stirring

pH of buffer solution (with stirring), $\text{pH}_s = \underline{6.90}$
 Shift on stirring, $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{0.008}$

Noise

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

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008
 Temperature record from the reference thermometer (T_R): 19.4 °C
 Temperature record from the ATC (T_{ATC}): 19.3 °C
 Temperature Difference, $|T_R - T_{ATC}|$: 0.1 °C

Acceptance Criteria

Performance Characteristic	Acceptable Range
Liquid Junction Error ΔpH_j	≤ 0.05
Shift on Stirring ΔpH_s	≤ 0.02
Noise ΔpH_n	≤ 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 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>17/09/2014</u>	Calibration Due Date : <u>16/12/2014</u>

Temperature Verification

Ref. No. of Reference Thermometer : ET/0521/008
 Ref. No. of Water Bath : ---

	Temperature (°C)			
	Measured	20.6	Corrected	20.0
Reference Thermometer reading	Measured	20.6	Corrected	20.0
DO Meter reading	Measured	19.8	Difference	0.2

Standardization of sodium thiosulphate (Na₂S₂O₃) solution

Reagent No. of Na ₂ S ₂ O ₃ titrant	CPE/012/4.5/001/8	Reagent No. of 0.025N K ₂ Cr ₂ O ₇	CPE/012/4.4/001/27
		Trial 1	Trial 2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)		0.00	10.40
Final Vol. of Na ₂ S ₂ O ₃ (ml)		10.40	20.80
Vol. of Na ₂ S ₂ O ₃ used (ml)		10.40	10.40
Normality of Na ₂ S ₂ O ₃ solution (N)		0.02404	0.02404
Average Normality (N) of Na ₂ S ₂ O ₃ solution (N)		0.02404	
Acceptance criteria, Deviation		Less than ± 0.001N	

Calculation: Normality of Na₂S₂O₃, N = 0.25 / ml Na₂S₂O₃ used

Linearity Checking

Determination of dissolved oxygen content by Winkler Titration *

Purging Time (min)	2		5		10	
	1	2	1	2	1	2
Trial						
Initial Vol. of Na ₂ S ₂ O ₃ (ml)	0.00	11.90	23.60	0.00	6.60	10.10
Final Vol. of Na ₂ S ₂ O ₃ (ml)	11.90	23.60	30.20	6.60	10.10	13.60
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	11.90	11.70	6.60	6.60	3.50	3.50
Dissolved Oxygen (DO), mg/L	7.68	7.55	4.26	4.26	2.26	2.26
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: DO (mg/L) = V x N x 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	7.71	7.67	7.69	7.68	7.55	7.62	0.91
5	4.20	4.18	4.19	4.26	4.26	4.26	1.66
10	2.36	2.38	2.37	2.26	2.26	2.26	4.75
Linear regression coefficient				0.9988			



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/012/4.7/002/25	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/25
-----------------------------	--------------------	-----------------------------	--------------------

Determination of dissolved oxygen content by Winkler Titration **

Salinity (ppt)	10		30	
	1	2	1	2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)	0.00	12.20	24.50	35.40
Final Vol. of Na ₂ S ₂ O ₃ (ml)	12.20	24.50	35.40	46.30
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	12.20	12.30	10.90	10.90
Dissolved Oxygen (DO), mg/L	7.87	7.94	7.03	7.03
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: DO (mg/L) = V x N x 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	7.79	7.81	7.8	7.87	7.94	7.91	1.40
30	6.92	6.94	6.93	7.03	7.03	7.03	1.43

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 : 17/09/2014 Due Date : 16/12/2014

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

S/001/5

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

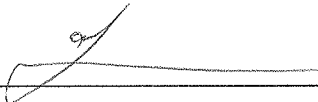
(*) Difference (%) = (Measured Salinity – Salinity Standard value) / Salinity Standard value x 100

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 - November 2014**

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

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

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 - December 2014**

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

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Nov
02-Nov	03-Nov	04-Nov	05-Nov	06-Nov	07-Nov	08-Nov
	WQM Mid-Ebb 9:41 (07:56 - 11:26) Mid-Flood 16:28 (14:43 - 18:13)		WQM Mid-Ebb 11:29 (09:44 - 13:14) Mid-Flood 17:36 (15:51 - 19:21)		WQM Mid-Ebb 13:00 (11:15 - 14:45) Mid-Flood 18:41 (16:56 - 20:26)	
09-Nov	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov
	WQM Mid-Flood 9:45 (08:00 - 11:30) Mid-Ebb 15:04 (13:19 - 16:49)		WQM Mid-Flood 11:22 (09:37 - 13:07) Mid-Ebb 16:25 (14:45 - 18:05)		WQM Mid-Ebb 5:19 (03:34 - 07:04) Mid-Flood 17:41 (15:56 - 19:26)	
16-Nov	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov
	WQM Mid-Ebb 8:45 (07:00 - 10:30) Mid-Flood 15:45 (14:00 - 17:30)		WQM Mid-Ebb 10:43 (08:58 - 12:28) Mid-Flood 16:43 (14:58 - 18:28)		WQM Mid-Ebb 12:06 (10:21 - 13:51) Mid-Flood 17:42 (15:57 - 19:27)	
23-Nov	24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov
	WQM Mid-Flood 8:40 (06:55 - 10:25) Mid-Ebb 14:10 (12:25 - 15:55)		WQM Mid-Flood 10:19 (08:34 - 12:04) Mid-Ebb 15:44 (13:59 - 17:29)		WQM Mid-Flood 12:11 (10:26 - 13:56) Mid-Ebb 17:41 (15:56 - 19:26)	

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section
Tentative Impact Marine Water Quality Monitoring (WQM) Schedule (December 14)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Dec	02-Dec	03-Dec	04-Dec	05-Dec	06-Dec
	WQM Mid-Ebb 8:02 (06:17 - 09:47) Mid-Flood 15:02 (13:17 - 16:47)		WQM Mid-Ebb 10:14 (08:29 - 11:59) Mid-Flood 16:23 (14:38 - 18:08)		WQM Mid-Ebb 12:01 (10:16 - 13:46) Mid-Flood 17:35 (15:50 - 19:20)	
07-Dec	08-Dec	09-Dec	10-Dec	11-Dec	12-Dec	13-Dec
	WQM Mid-Ebb 14:04 (12:19 - 15:49) Mid-Flood 19:16 (17:31 - 21:01)		WQM Mid-Flood 10:09 (08:24 - 11:54) Mid-Ebb 15:18 (13:33 - 17:03)		WQM Mid-Flood 11:28 (09:43 - 13:13) Mid-Ebb 16:40 (14:55 - 18:25)	
14-Dec	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec
	WQM Mid-Flood 13:45 (12:00 - 15:30) Mid-Ebb 20:15 (18:30 - 22:00)		WQM Mid-Ebb 8:46 (07:01 - 10:31) Mid-Flood 15:06 (13:21 - 16:51)		WQM Mid-Ebb 10:53 (09:08 - 12:38) Mid-Flood 16:23 (14:38 - 18:08)	
21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec
	WQM Mid-Ebb 13:13 (11:28 - 14:58) Mid-Flood 18:27 (16:42 - 20:12)		WQM Mid-Flood 9:18 (07:33 - 11:03) Mid-Ebb 14:43 (12:58 - 16:28)		WQM Mid-Flood 10:48 (09:03 - 12:33) Mid-Ebb 16:22 (14:37 - 18:07)	
28-Dec	29-Dec	30-Dec	31-Dec	01-Jan	02-Jan	03-Jan
	WQM Mid-Flood 13:19 (11:34 - 15:04) Mid-Ebb 19:57 (18:12 - 21:42)		WQM Mid-Ebb 8:41 (06:56 - 10:26) Mid-Flood 15:00 (13:15 - 16:45)			

**HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Impact Dolphin Monitoring Survey Monitoring Schedule - November 2014**

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

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 - December 2014**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Dec	02-Dec	03-Dec	04-Dec	05-Dec	06-Dec
		Impact Dolphin Monitoring				
07-Dec	08-Dec	09-Dec	10-Dec	11-Dec	12-Dec	13-Dec
		Impact Dolphin Monitoring				
14-Dec	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec
	Impact Dolphin Monitoring					
21-Dec	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec
	Impact Dolphin Monitoring			public holiday	public holiday	
28-Dec	29-Dec	30-Dec	31-Dec			

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

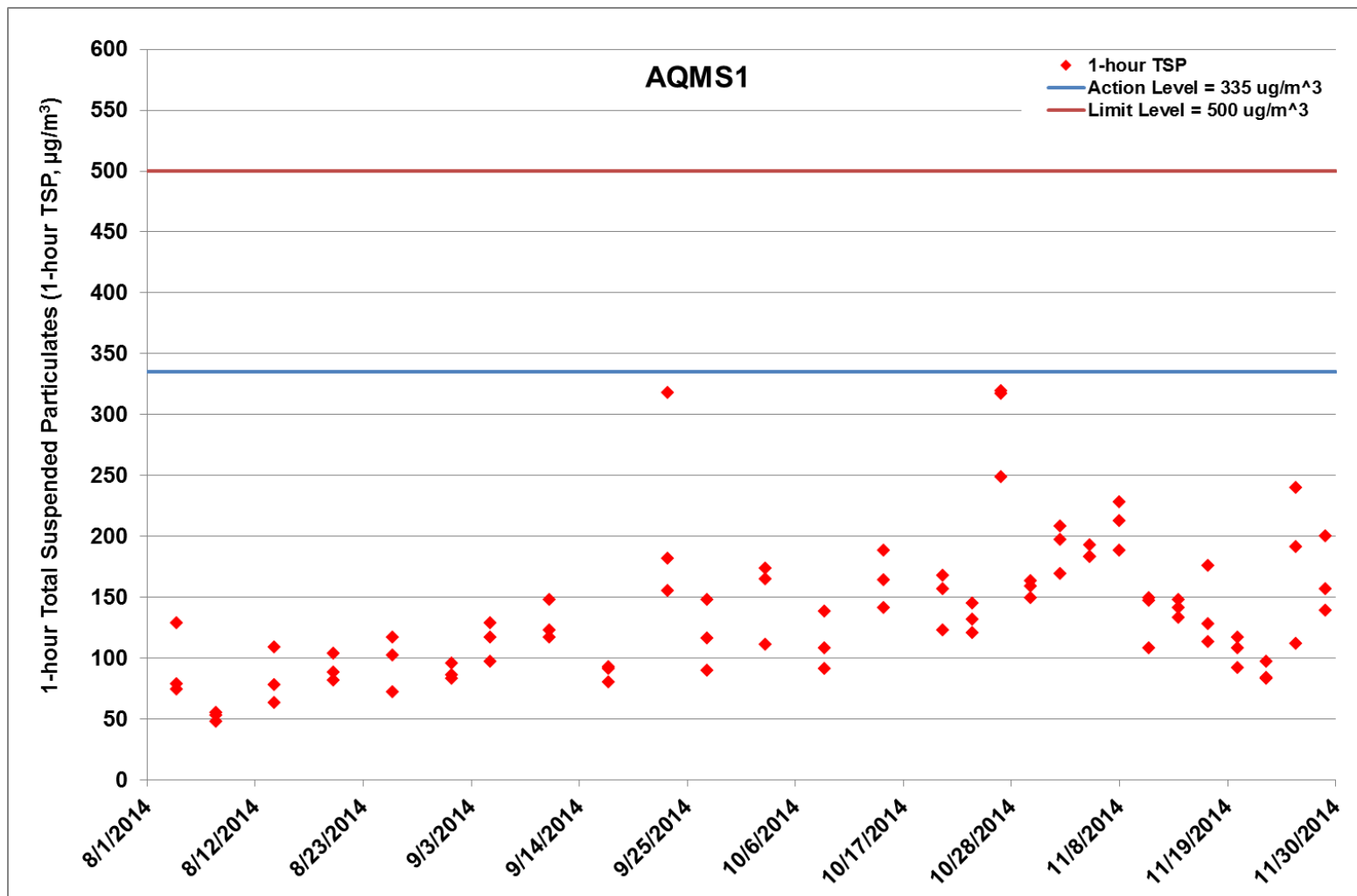


Figure G.1 Impact Monitoring – 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at AQMS1 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area – Portion N-A (1/8/2014 – 30/11/2014), Excavation for Launching Shaft (24/10/2014 – 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 – 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



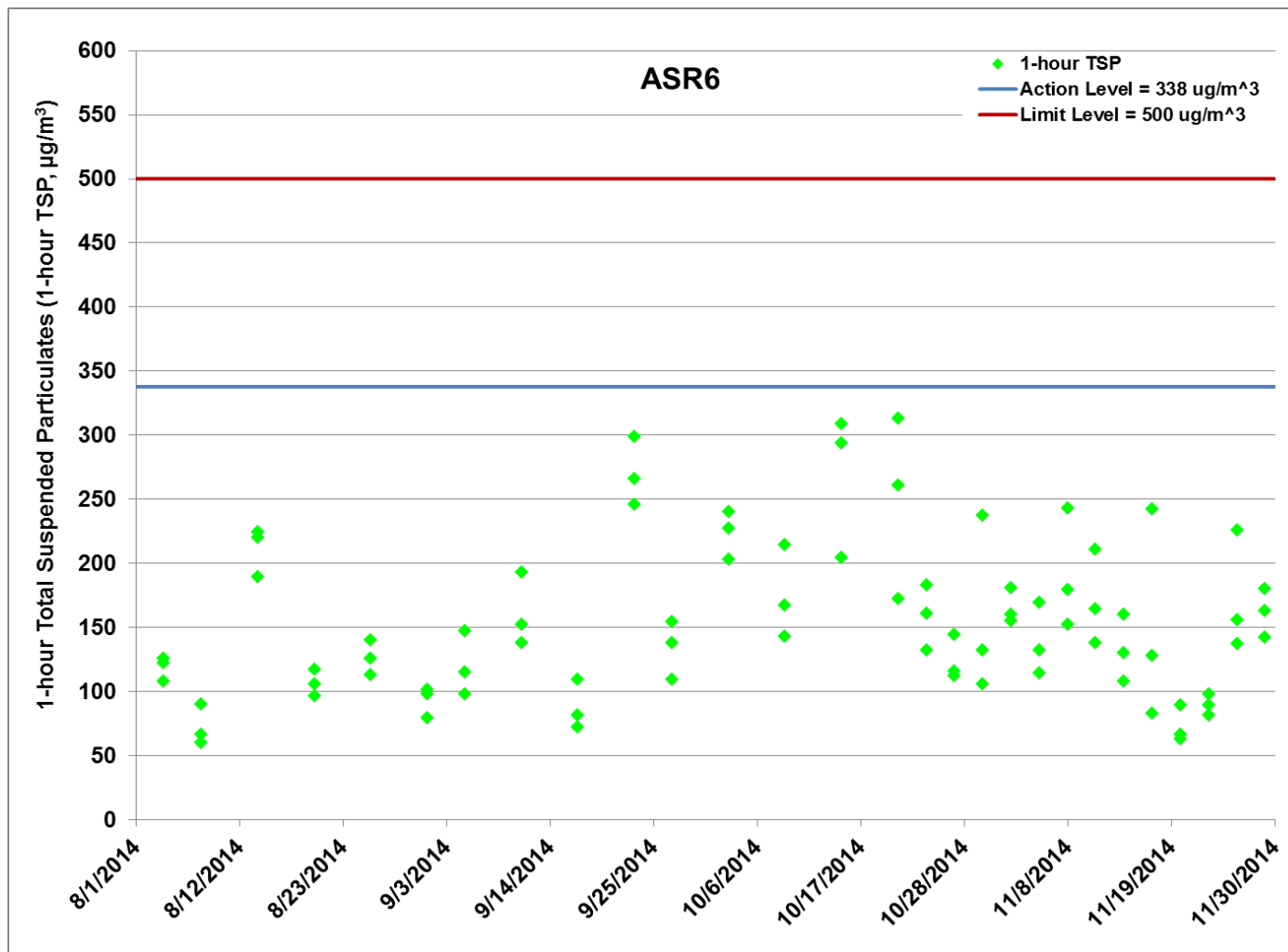


Figure G.2 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR6 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



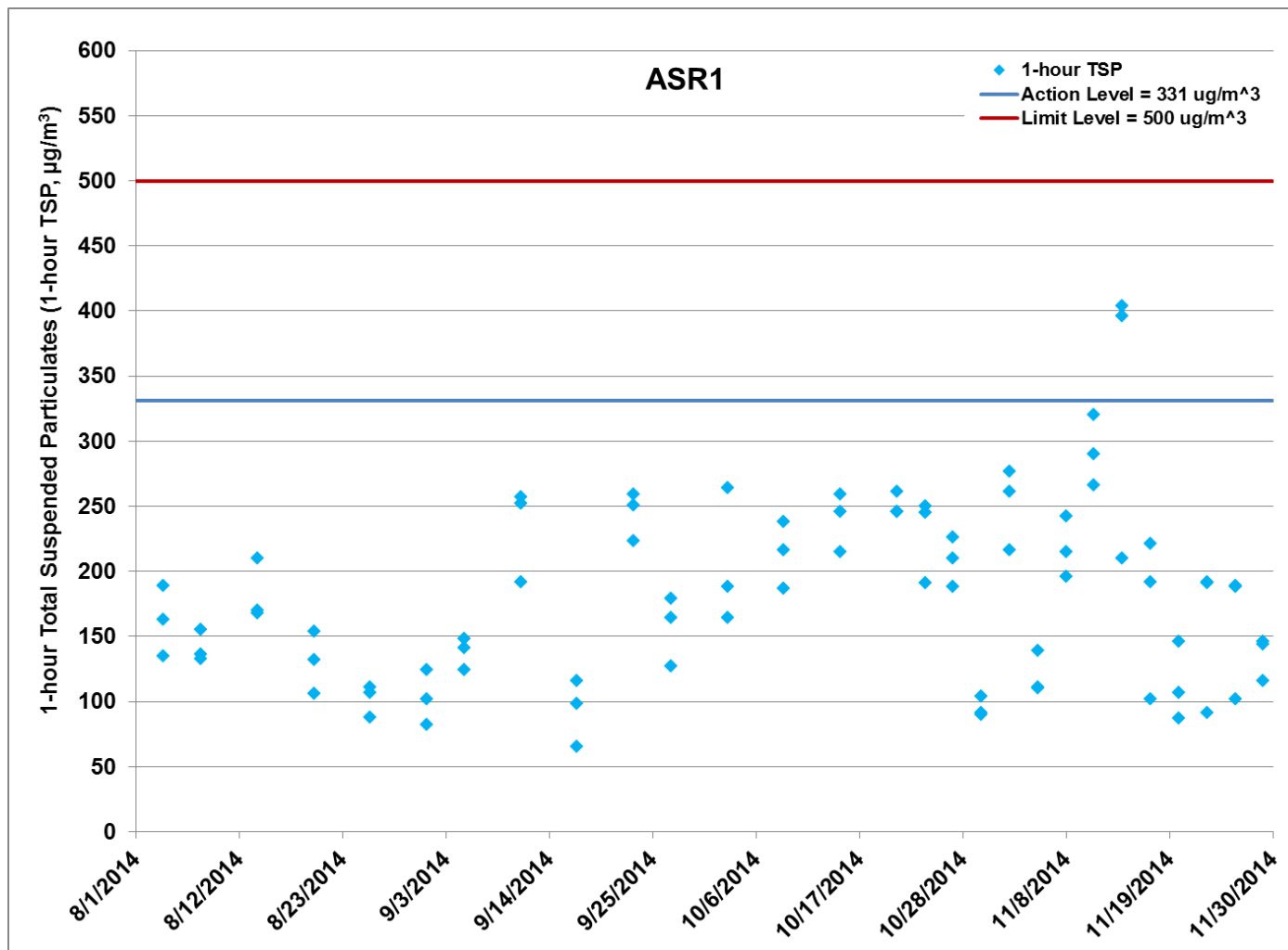


Figure G.3 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR1 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



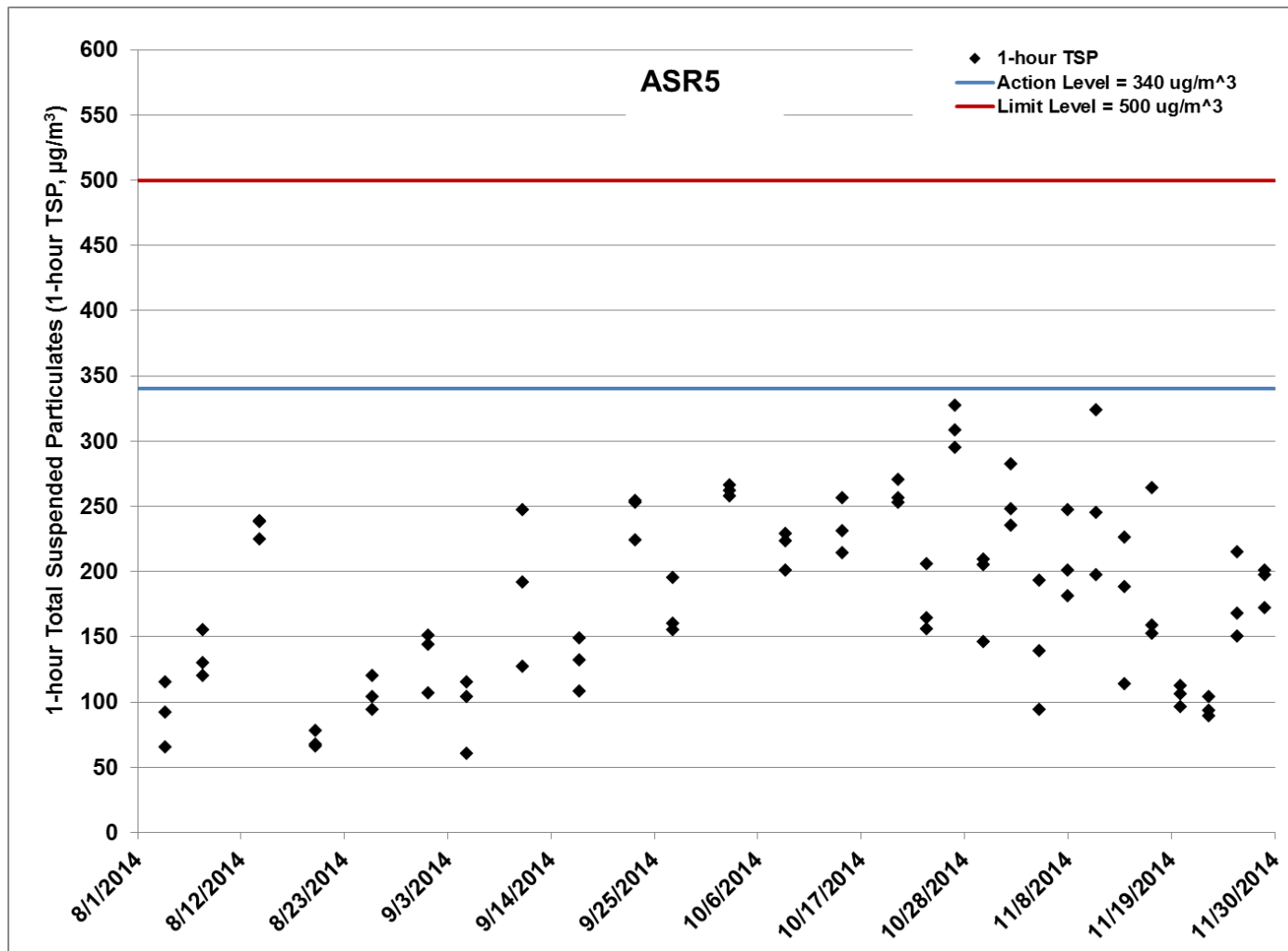


Figure G.4 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR5 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



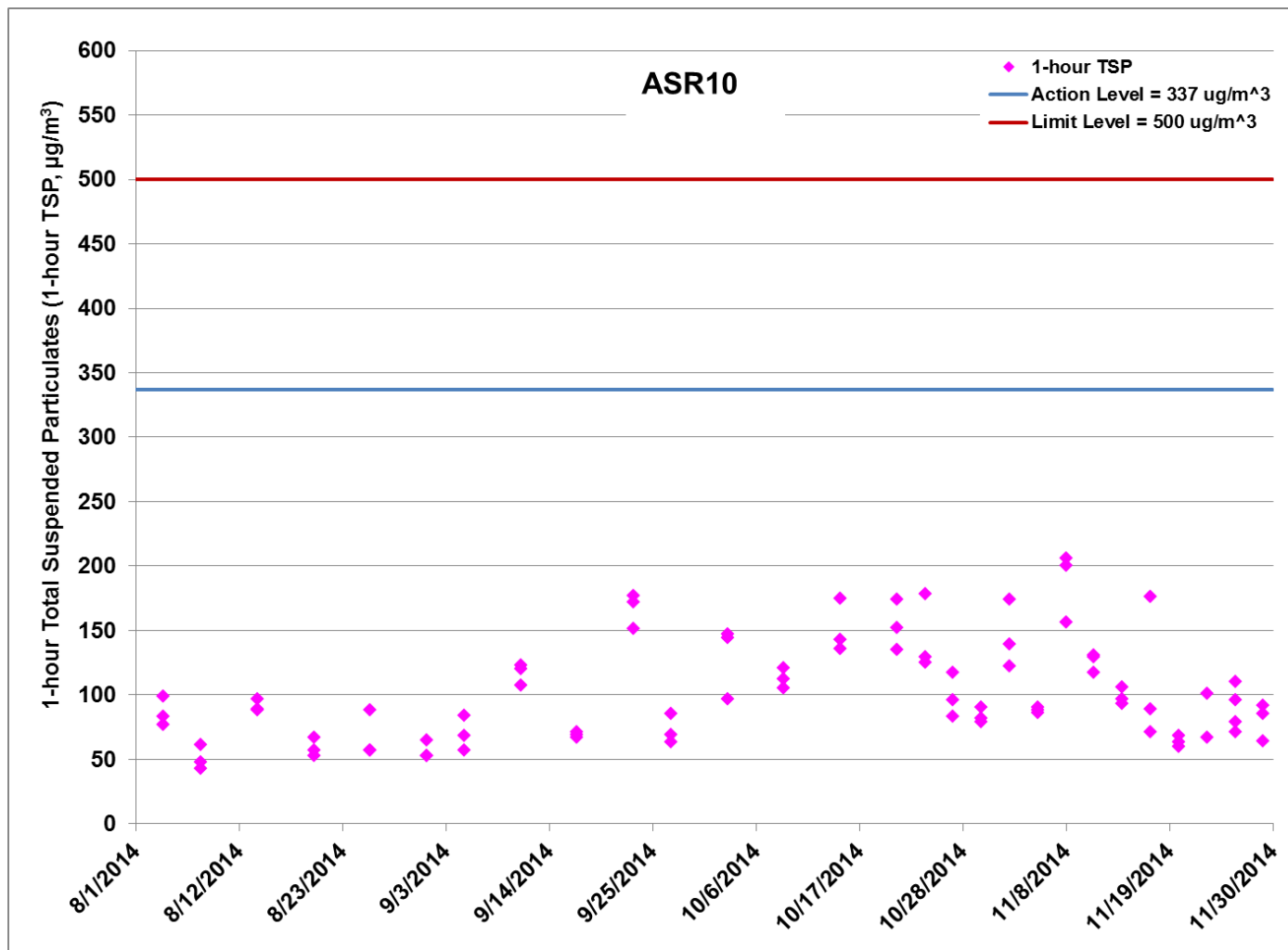


Figure G.5 Impact Monitoring - 1-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR10 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



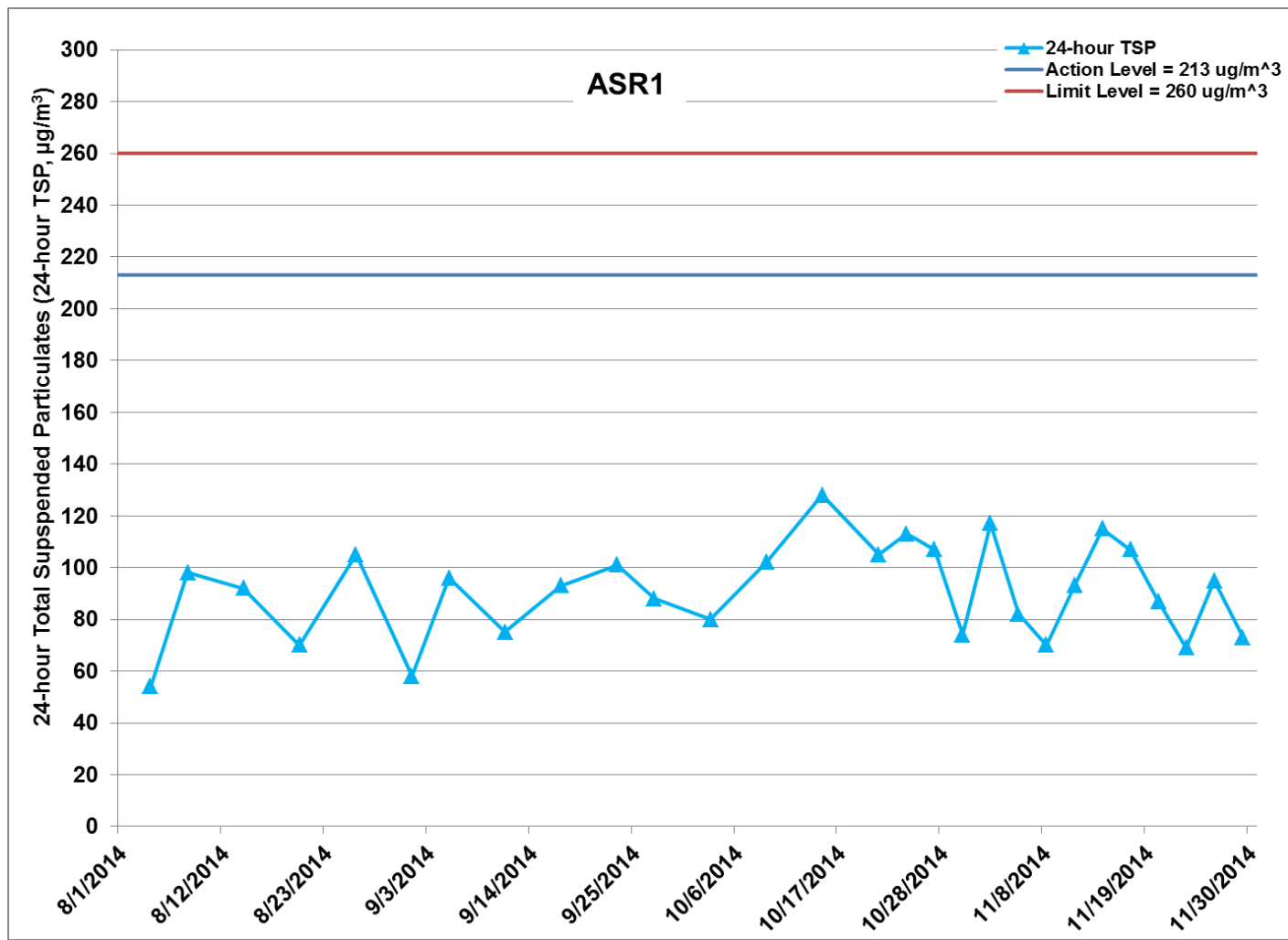


Figure G.6 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR1 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



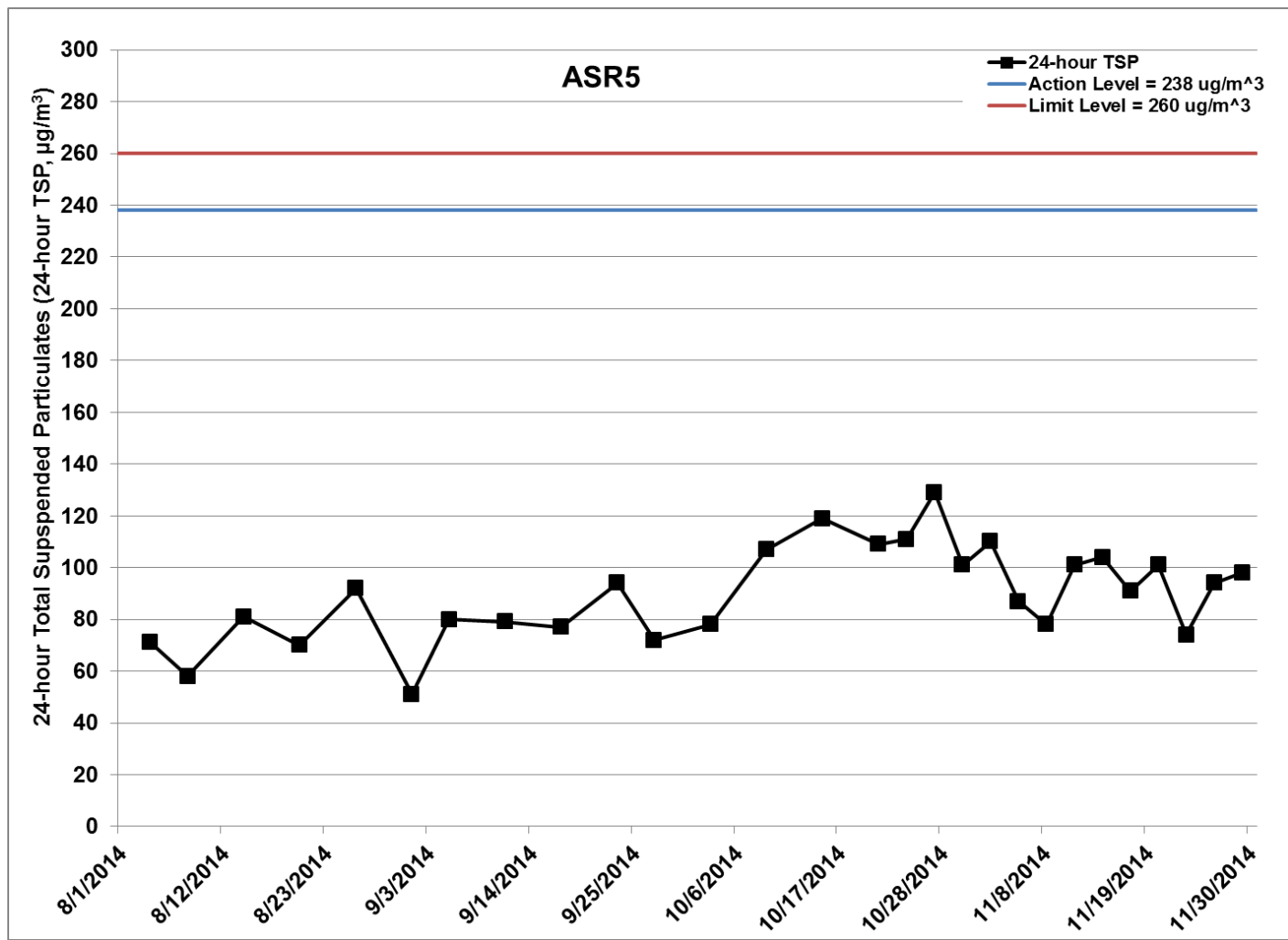


Figure G.7 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR5 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



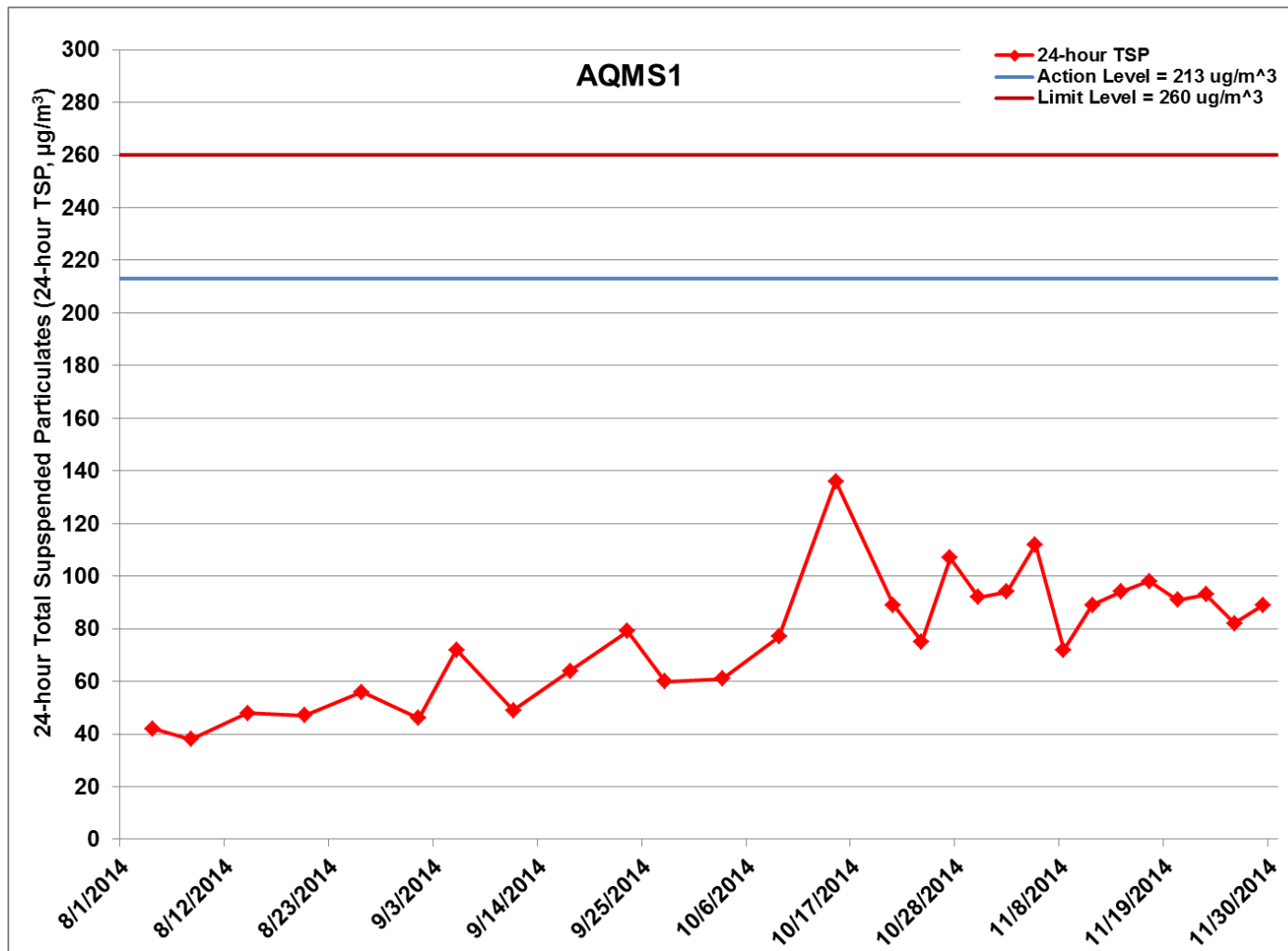


Figure G.8 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at AQMS1 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



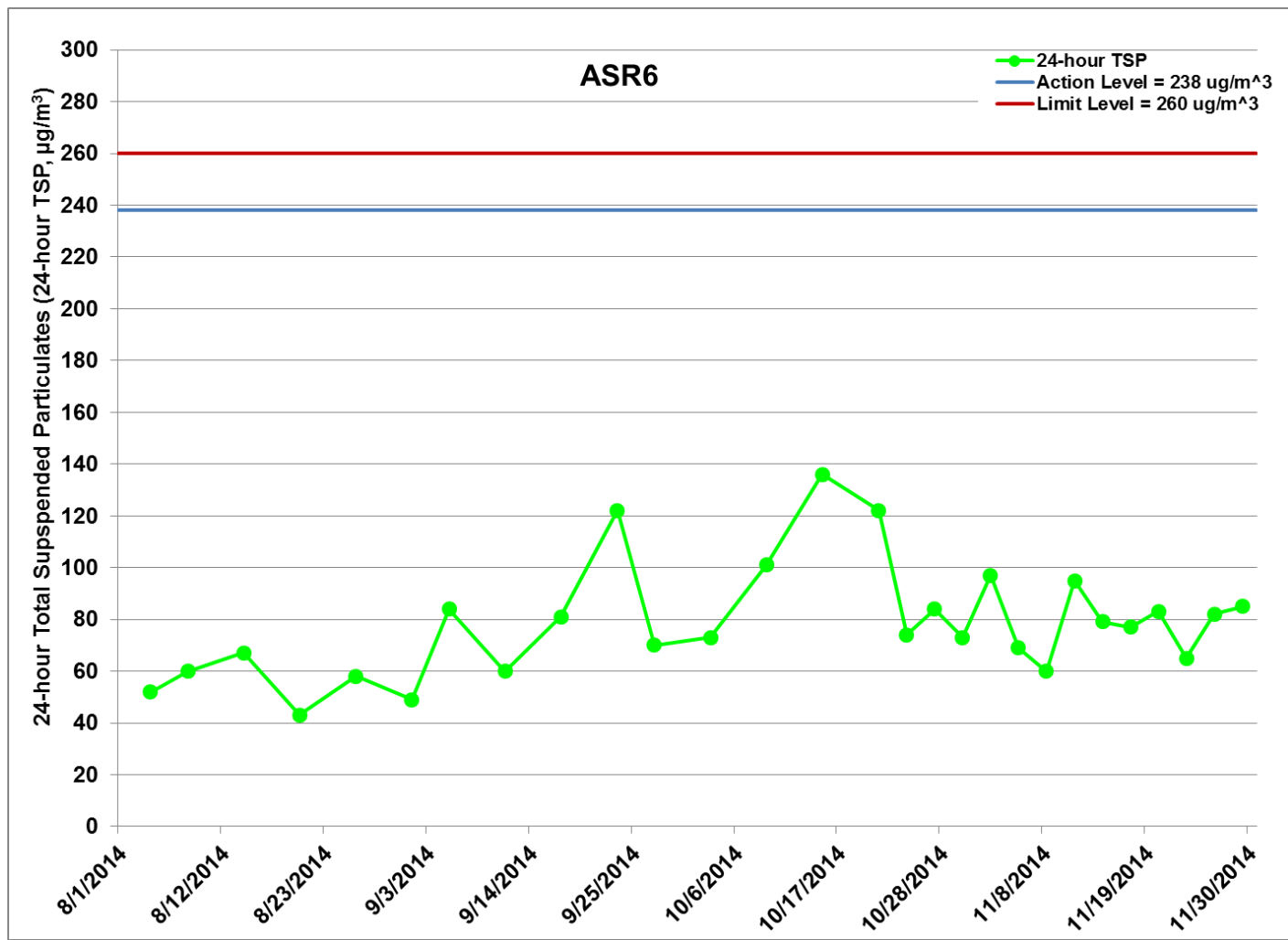


Figure G.9 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR6 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



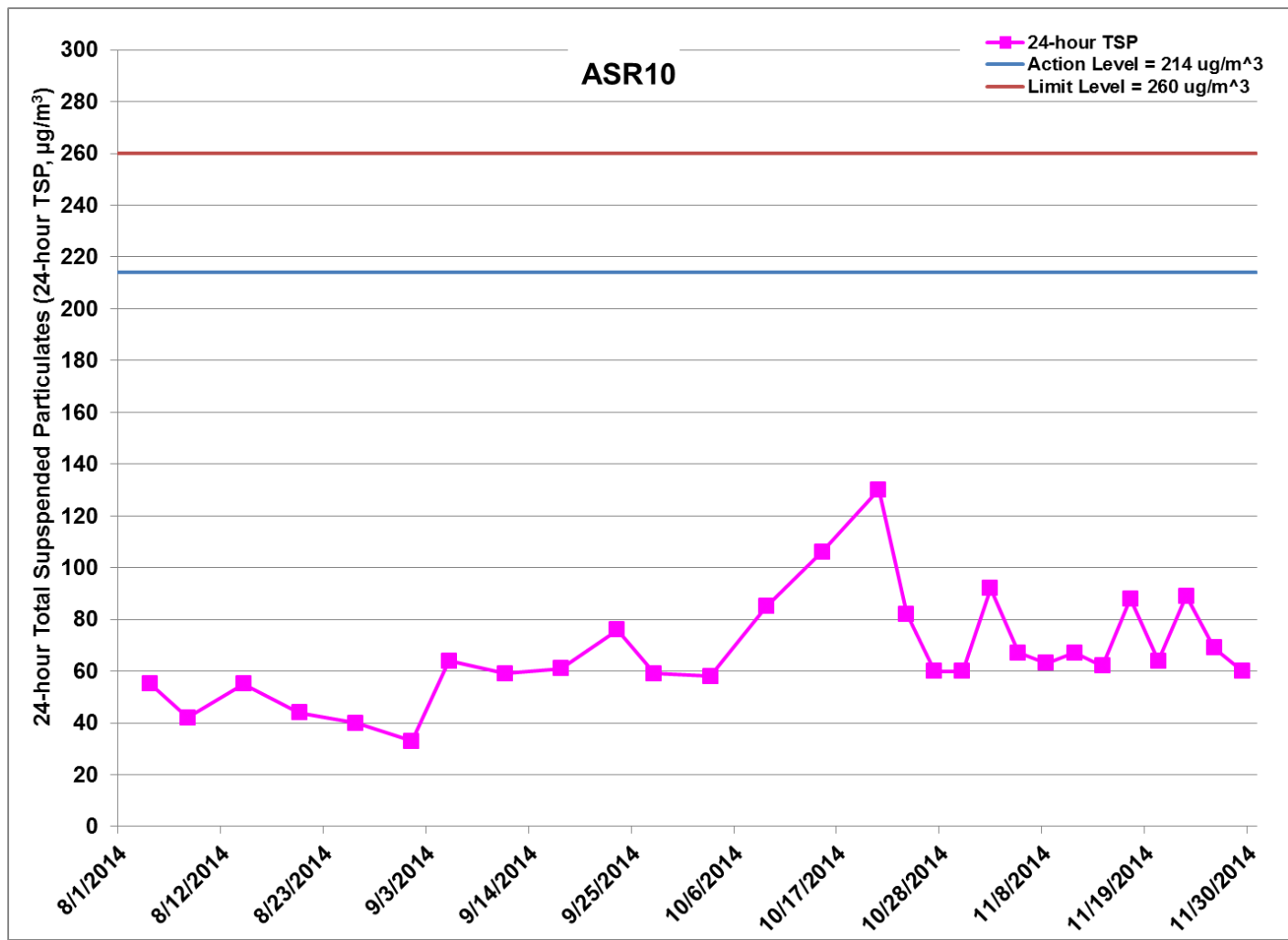


Figure G.10 Impact Monitoring - 24-hour Total Suspended Particulates ($\mu\text{g}/\text{m}^3$) at ASR10 between 1 August 2014 and 30 November 2014 during impact monitoring period. The weather conditions during the monitoring period varied from sunny to cloudy. Major land-based construction activities included: Diaphragm Wall Construction at Reclamation Area - Portion N-A (1/8/2014 - 30/11/2014), Excavation for Launching Shaft (24/10/2014 - 30/11/2014) & Construction of CLP Temporary Substation at N6 (1/8/2014 - 31/8/2014).

Ref: 0212330_Impact AQM graphs_Nov 2014_REV a.xlsx



Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-11-02	AQMS1	Cloudy	08:44	1-hour TSP	208	ug/m3
TMCLKL	HY/2012/08	2014-11-02	AQMS1	Cloudy	09:46	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2014-11-02	AQMS1	Cloudy	10:48	1-hour TSP	197	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR1	Cloudy	08:33	1-hour TSP	216	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR1	Cloudy	09:35	1-hour TSP	261	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR1	Cloudy	10:37	1-hour TSP	277	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR5	Cloudy	08:22	1-hour TSP	282	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR5	Cloudy	09:24	1-hour TSP	248	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR5	Cloudy	10:26	1-hour TSP	235	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR6	Cloudy	08:10	1-hour TSP	155	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR6	Cloudy	09:12	1-hour TSP	160	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR6	Cloudy	10:14	1-hour TSP	181	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR10	Cloudy	08:00	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR10	Cloudy	09:02	1-hour TSP	122	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR10	Cloudy	10:04	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2014-11-05	AQMS1	Cloudy	13:58	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2014-11-05	AQMS1	Cloudy	15:00	1-hour TSP	193	ug/m3
TMCLKL	HY/2012/08	2014-11-05	AQMS1	Cloudy	16:02	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR1	Cloudy	13:46	1-hour TSP	111	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR1	Cloudy	14:48	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR1	Cloudy	15:50	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR5	Cloudy	13:35	1-hour TSP	193	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR5	Cloudy	14:37	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR5	Cloudy	15:39	1-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR6	Cloudy	13:24	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR6	Cloudy	14:26	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR6	Cloudy	15:28	1-hour TSP	132	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR10	Cloudy	13:13	1-hour TSP	88	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR10	Cloudy	14:15	1-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR10	Cloudy	15:17	1-hour TSP	90	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-11-08	AQMS1	Rainy	14:37	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2014-11-08	AQMS1	Rainy	15:39	1-hour TSP	213	ug/m3
TMCLKL	HY/2012/08	2014-11-08	AQMS1	Rainy	16:41	1-hour TSP	228	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR1	Rainy	14:26	1-hour TSP	196	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR1	Rainy	15:28	1-hour TSP	215	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR1	Rainy	16:30	1-hour TSP	242	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR5	Rainy	14:14	1-hour TSP	201	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR5	Rainy	15:16	1-hour TSP	247	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR5	Rainy	16:18	1-hour TSP	181	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR6	Rainy	14:03	1-hour TSP	179	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR6	Rainy	15:05	1-hour TSP	243	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR6	Rainy	16:07	1-hour TSP	152	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR10	Rainy	13:52	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR10	Rainy	14:54	1-hour TSP	206	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR10	Rainy	15:56	1-hour TSP	200	ug/m3
TMCLKL	HY/2012/08	2014-11-11	AQMS1	Sunny	13:53	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2014-11-11	AQMS1	Sunny	14:55	1-hour TSP	147	ug/m3
TMCLKL	HY/2012/08	2014-11-11	AQMS1	Sunny	15:57	1-hour TSP	149	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR1	Sunny	13:42	1-hour TSP	290	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR1	Sunny	14:44	1-hour TSP	266	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR1	Sunny	15:46	1-hour TSP	320	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR5	Sunny	13:30	1-hour TSP	324	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR5	Sunny	14:32	1-hour TSP	245	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR5	Sunny	15:34	1-hour TSP	197	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR6	Sunny	13:19	1-hour TSP	211	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR6	Sunny	14:21	1-hour TSP	164	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR6	Sunny	15:23	1-hour TSP	138	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR10	Sunny	13:08	1-hour TSP	131	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR10	Sunny	14:10	1-hour TSP	129	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR10	Sunny	15:12	1-hour TSP	117	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-11-14	ASR10	Sunny	08:40	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR10	Sunny	09:42	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR10	Sunny	10:44	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR6	Sunny	08:52	1-hour TSP	130	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR6	Sunny	09:54	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR6	Sunny	10:56	1-hour TSP	160	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR5	Sunny	09:03	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR5	Sunny	10:05	1-hour TSP	226	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR5	Sunny	11:07	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR1	Sunny	09:15	1-hour TSP	404	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR1	Sunny	10:17	1-hour TSP	396	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR1	Sunny	11:19	1-hour TSP	210	ug/m3
TMCLKL	HY/2012/08	2014-11-14	AQMS1	Sunny	09:27	1-hour TSP	133	ug/m3
TMCLKL	HY/2012/08	2014-11-14	AQMS1	Sunny	10:29	1-hour TSP	148	ug/m3
TMCLKL	HY/2012/08	2014-11-14	AQMS1	Sunny	11:31	1-hour TSP	141	ug/m3
TMCLKL	HY/2012/08	2014-11-17	AQMS1	Sunny	14:06	1-hour TSP	176	ug/m3
TMCLKL	HY/2012/08	2014-11-17	AQMS1	Sunny	16:08	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2014-11-17	AQMS1	Sunny	16:10	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR1	Sunny	13:55	1-hour TSP	221	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR1	Sunny	14:57	1-hour TSP	192	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR1	Sunny	15:59	1-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR5	Sunny	13:44	1-hour TSP	264	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR5	Sunny	14:46	1-hour TSP	159	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR5	Sunny	15:48	1-hour TSP	152	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR6	Sunny	13:33	1-hour TSP	242	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR6	Sunny	14:35	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR6	Sunny	15:37	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR10	Sunny	13:22	1-hour TSP	176	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR10	Sunny	14:24	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR10	Sunny	15:26	1-hour TSP	71	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-11-20	ASR10	Sunny	07:40	1-hour TSP	63	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR10	Sunny	08:42	1-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR10	Sunny	09:44	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR6	Sunny	07:50	1-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR6	Sunny	08:52	1-hour TSP	63	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR6	Sunny	09:54	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR5	Sunny	08:02	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR5	Sunny	09:04	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR5	Sunny	10:06	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR1	Sunny	08:13	1-hour TSP	107	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR1	Sunny	09:15	1-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR1	Sunny	10:17	1-hour TSP	146	ug/m3
TMCLKL	HY/2012/08	2014-11-20	AQMS1	Sunny	08:24	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2014-11-20	AQMS1	Sunny	09:26	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2014-11-20	AQMS1	Sunny	10:28	1-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	2014-11-23	AQMS1	Sunny	09:32	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2014-11-23	AQMS1	Sunny	10:34	1-hour TSP	84	ug/m3
TMCLKL	HY/2012/08	2014-11-23	AQMS1	Sunny	11:36	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR1	Sunny	09:20	1-hour TSP	191	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR1	Sunny	10:22	1-hour TSP	192	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR1	Sunny	11:24	1-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR5	Sunny	09:08	1-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR5	Sunny	10:10	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR5	Sunny	11:12	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR6	Sunny	08:57	1-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR6	Sunny	09:59	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR6	Sunny	11:01	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR10	Sunny	08:45	1-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR10	Sunny	09:47	1-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Sunny	10:49	1-hour TSP	71	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-11-26	ASR10	Cloudy	13:03	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Cloudy	14:05	1-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Cloudy	15:07	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR6	Cloudy	13:14	1-hour TSP	226	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR6	Cloudy	14:16	1-hour TSP	137	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR6	Cloudy	15:18	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR5	Cloudy	13:25	1-hour TSP	150	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR5	Cloudy	14:27	1-hour TSP	168	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR5	Cloudy	15:29	1-hour TSP	215	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR1	Cloudy	13:37	1-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR1	Cloudy	14:39	1-hour TSP	189	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR1	Cloudy	15:41	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2014-11-26	AQMS1	Cloudy	13:48	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2014-11-26	AQMS1	Cloudy	14:50	1-hour TSP	191	ug/m3
TMCLKL	HY/2012/08	2014-11-26	AQMS1	Cloudy	15:52	1-hour TSP	240	ug/m3
TMCLKL	HY/2012/08	2014-11-02	AQMS1	Cloudy	11:50	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR1	Cloudy	11:39	24-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR5	Cloudy	11:28	24-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR6	Cloudy	11:16	24-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR10	Cloudy	11:06	24-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	2014-11-05	AQMS1	Cloudy	17:04	24-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR1	Cloudy	16:52	24-hour TSP	82	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR5	Cloudy	16:41	24-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR6	Cloudy	16:30	24-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR10	Cloudy	16:19	24-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2014-11-08	AQMS1	Rainy	17:43	24-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR1	Rainy	17:32	24-hour TSP	70	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR5	Rainy	17:20	24-hour TSP	78	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR6	Rainy	17:09	24-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR10	Rainy	16:58	24-hour TSP	63	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-11-11	AQMS1	Sunny	16:59	24-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR1	Sunny	16:48	24-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR5	Sunny	16:36	24-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR6	Sunny	16:25	24-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR10	Sunny	16:14	24-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR10	Sunny	11:46	24-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR6	Sunny	11:58	24-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR5	Sunny	12:09	24-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR1	Sunny	12:21	24-hour TSP	115	ug/m3
TMCLKL	HY/2012/08	2014-11-14	AQMS1	Sunny	12:33	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2014-11-17	AQMS1	Sunny	17:12	24-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR1	Sunny	17:01	24-hour TSP	107	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR5	Sunny	16:50	24-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR6	Sunny	16:39	24-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR10	Sunny	16:28	24-hour TSP	88	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR10	Sunny	10:46	24-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR6	Sunny	10:56	24-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR5	Sunny	11:08	24-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR1	Sunny	11:19	24-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2014-11-20	AQMS1	Sunny	11:30	24-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2014-11-23	AQMS1	Sunny	12:38	24-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR1	Sunny	12:26	24-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR5	Sunny	12:14	24-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR6	Sunny	12:03	24-hour TSP	65	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR10	Sunny	11:51	24-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Cloudy	16:09	24-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR6	Cloudy	16:20	24-hour TSP	82	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR5	Cloudy	16:31	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR1	Cloudy	15:43	24-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2014-11-26	AQMS1	Cloudy	16:54	24-hour TSP	82	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	units
TMCLKL	HY/2012/08	2014-11-29	ASR10	Sunny	08:00	1-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR10	Sunny	09:02	1-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR10	Sunny	10:04	1-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR6	Sunny	08:12	1-hour TSP	163	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR6	Sunny	09:14	1-hour TSP	180	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR6	Sunny	10:16	1-hour TSP	142	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR5	Sunny	08:23	1-hour TSP	197	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR5	Sunny	09:25	1-hour TSP	172	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR5	Sunny	10:27	1-hour TSP	201	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR1	Sunny	08:34	1-hour TSP	116	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR1	Sunny	09:36	1-hour TSP	146	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR1	Sunny	10:38	1-hour TSP	144	ug/m3
TMCLKL	HY/2012/08	2014-11-29	AQMS1	Sunny	08:45	1-hour TSP	200	ug/m3
TMCLKL	HY/2012/08	2014-11-29	AQMS1	Sunny	09:47	1-hour TSP	157	ug/m3
TMCLKL	HY/2012/08	2014-11-29	AQMS1	Sunny	10:49	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR10	Sunny	11:06	24-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR6	Sunny	11:18	24-hour TSP	85	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR5	Sunny	11:29	24-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2014-11-29	ASR1	Sunny	11:40	24-hour TSP	73	ug/m3
TMCLKL	HY/2012/08	2014-11-29	AQMS1	Sunny	11:51	24-hour TSP	89	ug/m3

Appendix H

Meteorological Data

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/02	0:00	0.4	108
14/11/02	1:00	0.4	64
14/11/02	2:00	0.9	44
14/11/02	3:00	0.9	100
14/11/02	4:00	0.9	77
14/11/02	5:00	1.3	91
14/11/02	6:00	0.9	105
14/11/02	7:00	0.4	71
14/11/02	8:00	0	44
14/11/02	9:00	1.3	32
14/11/02	10:00	1.3	51
14/11/02	11:00	1.8	62
14/11/02	12:00	1.8	57
14/11/02	13:00	1.8	10
14/11/02	14:00	2.2	11
14/11/02	15:00	2.7	21
14/11/02	16:00	2.7	356
14/11/02	17:00	2.7	344
14/11/02	18:00	0.9	22
14/11/02	19:00	0.9	31
14/11/02	20:00	1.3	18
14/11/02	21:00	2.2	32
14/11/02	22:00	2.2	34
14/11/02	23:00	3.1	51
14/11/03	0:00	4	47
14/11/03	1:00	4.5	43
14/11/03	2:00	4	38
14/11/03	3:00	3.1	32
14/11/03	4:00	1.3	30
14/11/03	5:00	1.8	12
14/11/03	6:00	2.2	5
14/11/03	7:00	2.2	46
14/11/03	8:00	3.1	51
14/11/03	9:00	3.1	55
14/11/03	10:00	2.7	62
14/11/03	11:00	1.8	49
14/11/03	12:00	1.8	37
14/11/03	13:00	1.8	30
14/11/03	14:00	2.2	29
14/11/03	15:00	1.8	41
14/11/03	16:00	1.8	11
14/11/03	17:00	1.3	8
14/11/03	18:00	0.9	11
14/11/05	0:00	0.9	85
14/11/05	1:00	1.3	40
14/11/05	2:00	1.3	39
14/11/05	3:00	1.3	105
14/11/05	4:00	1.8	113
14/11/05	5:00	3.1	115
14/11/05	6:00	3.6	129
14/11/05	7:00	2.7	130
14/11/05	8:00	3.6	126
14/11/05	9:00	3.6	131
14/11/05	10:00	3.1	142

Meteorological Data for Impact Monitoring in the reporting period

Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/05	11:00	3.1	150
14/11/05	12:00	3.1	152
14/11/05	13:00	2.7	133
14/11/05	14:00	2.7	142
14/11/05	15:00	2.7	117
14/11/05	16:00	2.7	139
14/11/05	17:00	2.2	168
14/11/05	18:00	3.1	177
14/11/05	19:00	3.1	142
14/11/05	20:00	3.1	151
14/11/05	21:00	2.2	138
14/11/05	22:00	2.7	151
14/11/05	23:00	3.1	162
14/11/06	0:00	3.1	139
14/11/06	1:00	1.3	85
14/11/06	2:00	0.9	79
14/11/06	3:00	0.9	92
14/11/06	4:00	0.4	100
14/11/06	5:00	0.4	74
14/11/06	6:00	0.4	62
14/11/06	7:00	0	91
14/11/06	8:00	0.4	88
14/11/06	9:00	0.9	132
14/11/06	10:00	0.9	151
14/11/06	11:00	0.4	162
14/11/06	12:00	1.3	238
14/11/06	13:00	1.3	351
14/11/06	14:00	2.2	356
14/11/06	15:00	2.2	342
14/11/06	16:00	2.7	358
14/11/06	17:00	2.2	5
14/11/06	18:00	1.8	356
14/11/06	19:00	0.9	10
14/11/06	20:00	1.8	132
14/11/06	21:00	0.9	125
14/11/06	22:00	0.9	46
14/11/06	23:00	0.4	38
14/11/08	0:00	0.9	51
14/11/08	1:00	0	55
14/11/08	2:00	0.4	62
14/11/08	3:00	0	347
14/11/08	4:00	0.9	6
14/11/08	5:00	0.9	41
14/11/08	6:00	0.9	351
14/11/08	7:00	0.9	12
14/11/08	8:00	2.2	16
14/11/08	9:00	3.1	41
14/11/08	10:00	3.1	38
14/11/08	11:00	3.6	51
14/11/08	12:00	1.3	46
14/11/08	13:00	1.8	52
14/11/08	14:00	4	38
14/11/08	15:00	4	47
14/11/08	16:00	3.1	59

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/08	17:00	1.8	61
14/11/08	18:00	1.3	55
14/11/08	19:00	0.9	54
14/11/08	20:00	2.2	53
14/11/08	21:00	2.7	52
14/11/08	22:00	2.7	48
14/11/08	23:00	2.7	60
14/11/09	0:00	2.7	37
14/11/09	1:00	1.8	34
14/11/09	2:00	0.9	62
14/11/09	3:00	0.9	55
14/11/09	4:00	1.8	51
14/11/09	5:00	1.8	50
14/11/09	6:00	1.8	71
14/11/09	7:00	2.2	56
14/11/09	8:00	2.2	59
14/11/09	9:00	2.2	88
14/11/09	10:00	1.8	74
14/11/09	11:00	1.3	58
14/11/09	12:00	1.3	63
14/11/09	13:00	1.3	115
14/11/09	14:00	2.2	123
14/11/09	15:00	2.7	144
14/11/09	16:00	2.7	131
14/11/09	17:00	1.8	127
14/11/09	18:00	0.4	134
14/11/09	19:00	0.4	49
14/11/09	20:00	0.4	51
14/11/09	21:00	0.9	58
14/11/09	22:00	0.9	67
14/11/09	23:00	1.8	51
14/11/11	0:00	0.4	105
14/11/11	1:00	0	74
14/11/11	2:00	0	223
14/11/11	3:00	0.4	141
14/11/11	4:00	0.4	95
14/11/11	5:00	0.4	74
14/11/11	6:00	0.4	61
14/11/11	7:00	0.4	100
14/11/11	8:00	0.9	66
14/11/11	9:00	1.3	92
14/11/11	10:00	1.8	113
14/11/11	11:00	1.8	145
14/11/11	12:00	0.4	174
14/11/11	13:00	0.9	26
14/11/11	14:00	0.9	344
14/11/11	15:00	1.8	358
14/11/11	16:00	1.8	5
14/11/11	17:00	0.4	9
14/11/11	18:00	0.9	131
14/11/11	19:00	0.9	119
14/11/11	20:00	0.9	105
14/11/11	21:00	0.9	41
14/11/11	22:00	0.4	132

Meteorological Data for Impact Monitoring in the reporting period

Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/11	23:00	0.4	12
14/11/12	0:00	1.8	36
14/11/12	1:00	1.3	44
14/11/12	2:00	0.4	51
14/11/12	3:00	0.9	58
14/11/12	4:00	2.7	62
14/11/12	5:00	2.7	55
14/11/12	6:00	2.7	59
14/11/12	7:00	3.1	43
14/11/12	8:00	2.7	41
14/11/12	9:00	3.1	38
14/11/12	10:00	3.1	47
14/11/12	11:00	3.1	46
14/11/12	12:00	3.1	52
14/11/12	13:00	3.1	34
14/11/12	14:00	3.1	9
14/11/12	15:00	3.1	61
14/11/12	16:00	2.2	66
14/11/12	17:00	1.8	71
14/11/12	18:00	0.9	58
14/11/12	19:00	2.2	59
14/11/12	20:00	1.8	61
14/11/12	21:00	2.2	47
14/11/12	22:00	3.1	44
14/11/12	23:00	4	43
14/11/14	0:00	2.7	40
14/11/14	1:00	3.1	37
14/11/14	2:00	2.2	51
14/11/14	3:00	1.8	43
14/11/14	4:00	2.2	51
14/11/14	5:00	2.7	48
14/11/14	6:00	2.2	51
14/11/14	7:00	1.8	37
14/11/14	8:00	2.2	42
14/11/14	9:00	2.7	33
14/11/14	10:00	2.7	28
14/11/14	11:00	2.7	51
14/11/14	12:00	2.2	39
14/11/14	13:00	1.8	45
14/11/14	14:00	0.9	37
14/11/14	15:00	0.4	262
14/11/14	16:00	0.9	13
14/11/14	17:00	1.3	49
14/11/14	18:00	1.8	124
14/11/14	19:00	0.4	51
14/11/14	20:00	1.3	127
14/11/14	21:00	0.4	38
14/11/14	22:00	0.9	42
14/11/14	23:00	1.3	51
14/11/15	0:00	1.3	68
14/11/15	1:00	1.3	74
14/11/15	2:00	1.8	93
14/11/15	3:00	1.8	101
14/11/15	4:00	2.2	94

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/15	5:00	0.9	89
14/11/15	6:00	0.4	42
14/11/15	7:00	0.9	38
14/11/15	8:00	1.3	51
14/11/15	9:00	1.3	47
14/11/15	10:00	1.3	44
14/11/15	11:00	1.3	179
14/11/15	12:00	0.4	185
14/11/15	13:00	1.3	191
14/11/15	14:00	2.7	174
14/11/15	15:00	2.2	165
14/11/15	16:00	2.7	159
14/11/15	17:00	2.7	134
14/11/15	18:00	2.2	171
14/11/15	19:00	1.8	159
14/11/15	20:00	1.8	114
14/11/15	21:00	1.8	121
14/11/15	22:00	0	47
14/11/15	23:00	0	49
14/11/17	0:00	1.8	39
14/11/17	1:00	2.7	51
14/11/17	2:00	2.7	50
14/11/17	3:00	2.2	21
14/11/17	4:00	3.6	38
14/11/17	5:00	3.6	52
14/11/17	6:00	1.8	49
14/11/17	7:00	2.2	62
14/11/17	8:00	4	53
14/11/17	9:00	4.5	55
14/11/17	10:00	4	57
14/11/17	11:00	2.7	40
14/11/17	12:00	2.2	38
14/11/17	13:00	2.2	50
14/11/17	14:00	2.2	43
14/11/17	15:00	2.2	66
14/11/17	16:00	2.2	71
14/11/17	17:00	2.2	49
14/11/17	18:00	2.7	62
14/11/17	19:00	3.6	50
14/11/17	20:00	4	42
14/11/17	21:00	4.5	39
14/11/17	22:00	4	61
14/11/17	23:00	4	51
14/11/18	0:00	4.5	55
14/11/18	1:00	4.9	57
14/11/18	2:00	4.5	42
14/11/18	3:00	3.1	44
14/11/18	4:00	3.1	19
14/11/18	5:00	2.2	39
14/11/18	6:00	0.9	355
14/11/18	7:00	1.3	44
14/11/18	8:00	1.8	39
14/11/18	9:00	2.2	56
14/11/18	10:00	3.1	54

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/18	11:00	2.7	52
14/11/18	12:00	1.8	47
14/11/18	13:00	1.8	61
14/11/18	14:00	0.9	70
14/11/18	15:00	0.4	71
14/11/18	16:00	0.9	38
14/11/18	17:00	1.3	52
14/11/18	18:00	1.8	10
14/11/18	19:00	1.8	8
14/11/18	20:00	0.9	23
14/11/18	21:00	0.9	21
14/11/18	22:00	2.2	39
14/11/18	23:00	2.2	46
14/11/20	0:00	0	47
14/11/20	1:00	0	52
14/11/20	2:00	0.4	58
14/11/20	3:00	0.9	63
14/11/20	4:00	1.8	40
14/11/20	5:00	1.8	33
14/11/20	6:00	0.9	39
14/11/20	7:00	0.9	88
14/11/20	8:00	1.3	50
14/11/20	9:00	1.3	49
14/11/20	10:00	1.3	51
14/11/20	11:00	2.2	138
14/11/20	12:00	1.8	135
14/11/20	13:00	1.8	179
14/11/20	14:00	2.2	182
14/11/20	15:00	1.3	190
14/11/20	16:00	0.4	173
14/11/20	17:00	1.3	144
14/11/20	18:00	2.2	136
14/11/20	19:00	3.1	152
14/11/20	20:00	2.7	128
14/11/20	21:00	1.8	119
14/11/20	22:00	1.3	110
14/11/20	23:00	1.8	109
14/11/21	0:00	1.3	121
14/11/21	1:00	1.3	87
14/11/21	2:00	1.3	46
14/11/21	3:00	0.9	92
14/11/21	4:00	0.9	42
14/11/21	5:00	0.9	100
14/11/21	6:00	0.9	56
14/11/21	7:00	1.3	84
14/11/21	8:00	2.2	38
14/11/21	9:00	2.2	42
14/11/21	10:00	1.3	46
14/11/21	11:00	1.3	58
14/11/21	12:00	2.2	179
14/11/21	13:00	1.8	183
14/11/21	14:00	0.9	256
14/11/21	15:00	0.9	245
14/11/21	16:00	0.9	275

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/21	17:00	0.4	268
14/11/21	18:00	0	273
14/11/21	19:00	0.4	354
14/11/21	20:00	0.4	344
14/11/21	21:00	0	10
14/11/21	22:00	0	123
14/11/21	23:00	0	103
14/11/23	0:00	1.8	98
14/11/23	1:00	2.7	95
14/11/23	2:00	2.2	88
14/11/23	3:00	2.7	116
14/11/23	4:00	3.1	106
14/11/23	5:00	3.6	132
14/11/23	6:00	2.7	114
14/11/23	7:00	2.2	108
14/11/23	8:00	1.8	85
14/11/23	9:00	3.1	113
14/11/23	10:00	3.6	127
14/11/23	11:00	4.5	114
14/11/23	12:00	3.1	135
14/11/23	13:00	3.1	139
14/11/23	14:00	2.7	145
14/11/23	15:00	2.2	151
14/11/23	16:00	2.7	162
14/11/23	17:00	3.1	153
14/11/23	18:00	2.2	154
14/11/23	19:00	2.7	139
14/11/23	20:00	2.2	144
14/11/23	21:00	1.8	121
14/11/23	22:00	0.9	118
14/11/23	23:00	0.9	109
14/11/24	0:00	0.4	127
14/11/24	1:00	0.9	116
14/11/24	2:00	1.8	117
14/11/24	3:00	1.3	95
14/11/24	4:00	0	113
14/11/24	5:00	0.4	46
14/11/24	6:00	0.4	95
14/11/24	7:00	0.4	101
14/11/24	8:00	0.4	79
14/11/24	9:00	0.4	88
14/11/24	10:00	1.3	122
14/11/24	11:00	0.4	178
14/11/24	12:00	1.8	144
14/11/24	13:00	1.8	166
14/11/24	14:00	1.3	159
14/11/24	15:00	2.7	179
14/11/24	16:00	2.2	183
14/11/24	17:00	2.7	188
14/11/24	18:00	0.4	167
14/11/26	0:00	0	10
14/11/26	1:00	0	13
14/11/26	2:00	0.4	355
14/11/26	3:00	0.4	346

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/26	4:00	0.4	351
14/11/26	5:00	0	11
14/11/26	6:00	0.4	5
14/11/26	7:00	0.4	34
14/11/26	8:00	0.4	31
14/11/26	9:00	1.8	25
14/11/26	10:00	1.3	21
14/11/26	11:00	2.2	26
14/11/26	12:00	2.7	14
14/11/26	13:00	2.7	28
14/11/26	14:00	2.7	37
14/11/26	15:00	2.7	33
14/11/26	16:00	3.1	26
14/11/26	17:00	4	22
14/11/26	18:00	3.6	5
14/11/26	19:00	3.6	24
14/11/26	20:00	2.2	22
14/11/26	21:00	2.7	123
14/11/26	22:00	3.1	114
14/11/26	23:00	4.5	140
14/11/27	0:00	4	126
14/11/27	1:00	4	134
14/11/27	2:00	2.2	91
14/11/27	3:00	1.8	89
14/11/27	4:00	1.8	80
14/11/27	5:00	0.9	93
14/11/27	6:00	0.9	46
14/11/27	7:00	1.3	39
14/11/27	8:00	0.9	33
14/11/27	9:00	0.9	101
14/11/27	10:00	1.8	118
14/11/27	11:00	0.9	105
14/11/27	12:00	0.4	178
14/11/27	13:00	2.2	128
14/11/27	14:00	1.8	104
14/11/27	15:00	3.6	135
14/11/27	16:00	4	126
14/11/27	17:00	4	118
14/11/27	18:00	4.5	146
14/11/27	19:00	4	151
14/11/27	20:00	3.1	126
14/11/27	21:00	4	139
14/11/27	22:00	4.5	151
14/11/27	23:00	3.6	144
14/11/29	0:00	1.3	127
14/11/29	1:00	0.4	90
14/11/29	2:00	0.4	172
14/11/29	3:00	0	169
14/11/29	4:00	0.4	144
14/11/29	5:00	0.4	130
14/11/29	6:00	2.2	124
14/11/29	7:00	1.8	151
14/11/29	8:00	1.8	46
14/11/29	9:00	2.2	118

Meteorological Data for Impact Monitoring in the reporting period			
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction (degree)
14/11/29	10:00	2.2	124
14/11/29	11:00	3.1	136
14/11/29	12:00	3.6	151
14/11/29	13:00	3.6	155
14/11/29	14:00	3.6	162
14/11/29	15:00	2.7	147
14/11/29	16:00	4	133
14/11/29	17:00	2.7	150
14/11/29	18:00	2.7	116
14/11/29	19:00	3.1	137
14/11/29	20:00	3.6	105
14/11/29	21:00	4	116
14/11/29	22:00	3.6	141
14/11/29	23:00	3.6	122
14/11/30	0:00	3.6	119
14/11/30	1:00	2.7	137
14/11/30	2:00	2.2	116
14/11/30	3:00	1.8	108
14/11/30	4:00	1.8	112
14/11/30	5:00	1.8	105
14/11/30	6:00	1.8	101
14/11/30	7:00	2.2	100
14/11/30	8:00	1.8	136
14/11/30	9:00	2.2	130
14/11/30	10:00	2.7	141
14/11/30	11:00	2.7	152
14/11/30	12:00	0.9	177
14/11/30	13:00	0.4	169
14/11/30	14:00	0.4	181
14/11/30	15:00	0.4	172
14/11/30	16:00	0.9	223
14/11/30	17:00	0.4	218
14/11/30	18:00	0	242
14/11/30	19:00	0	274
14/11/30	20:00	0.4	236
14/11/30	21:00	0.9	245
14/11/30	22:00	1.3	218
14/11/30	23:00	0	225

Appendix I

Impact Water Quality Monitoring Results

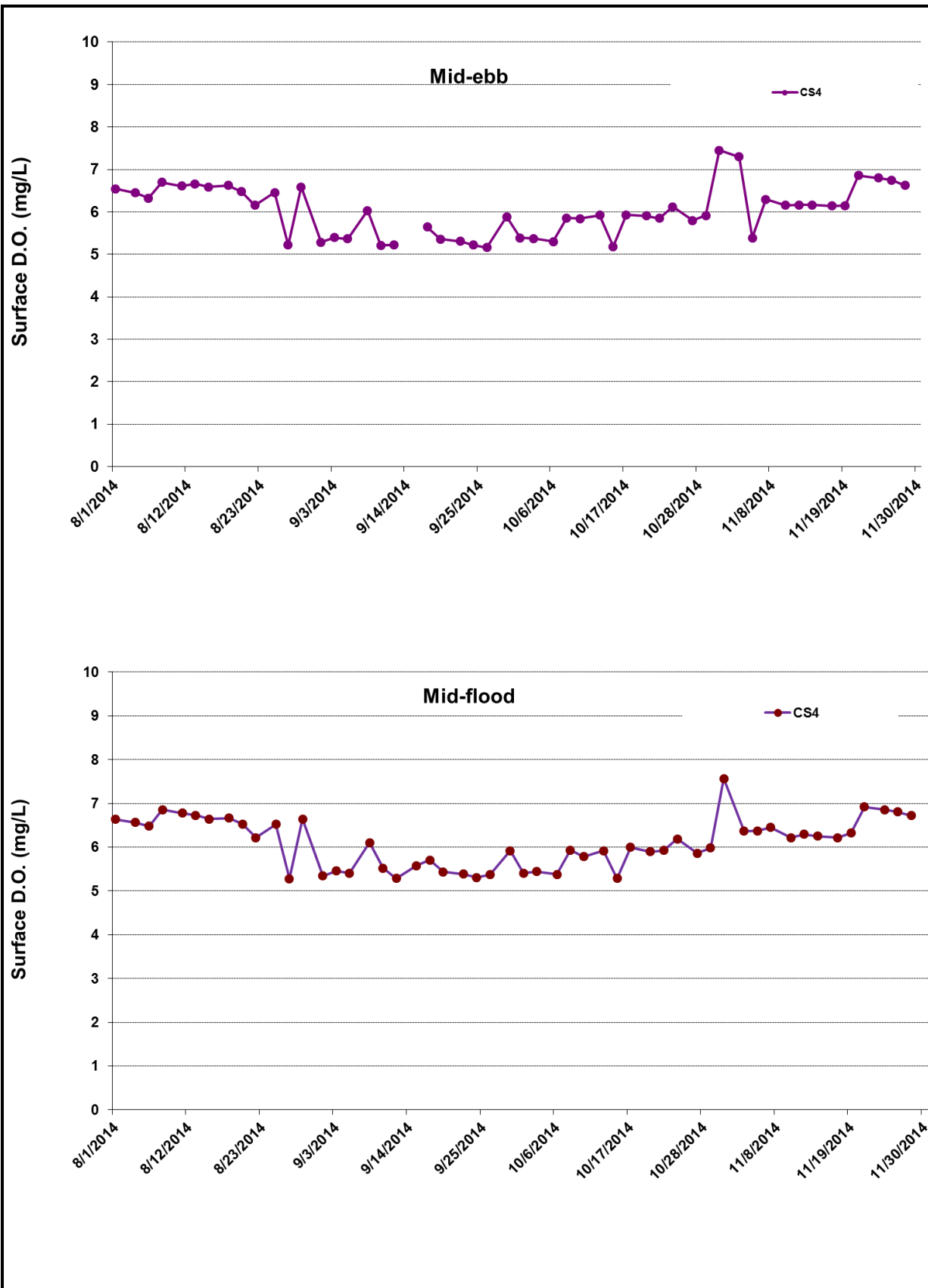


Figure I1 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



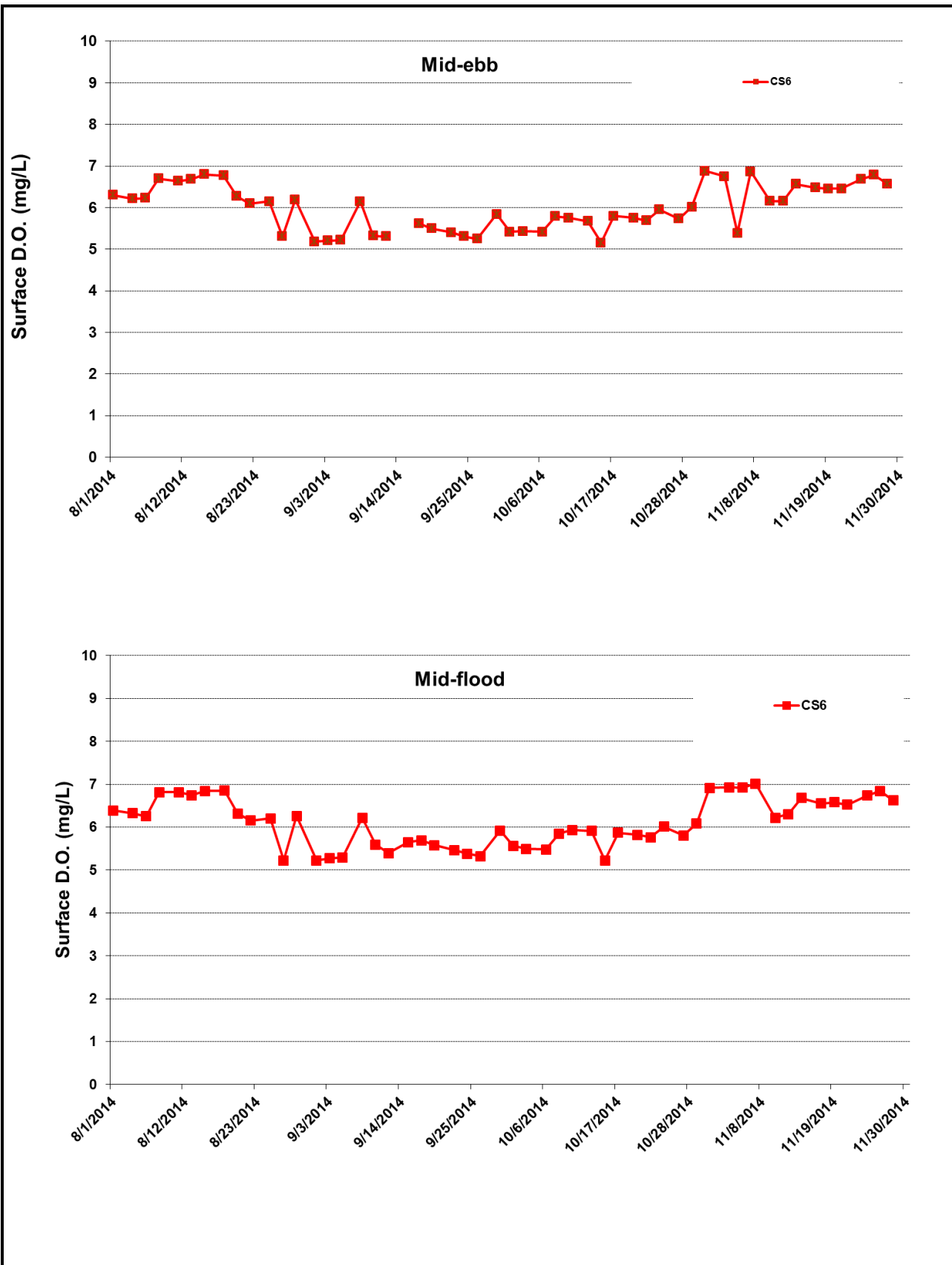


Figure I2 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



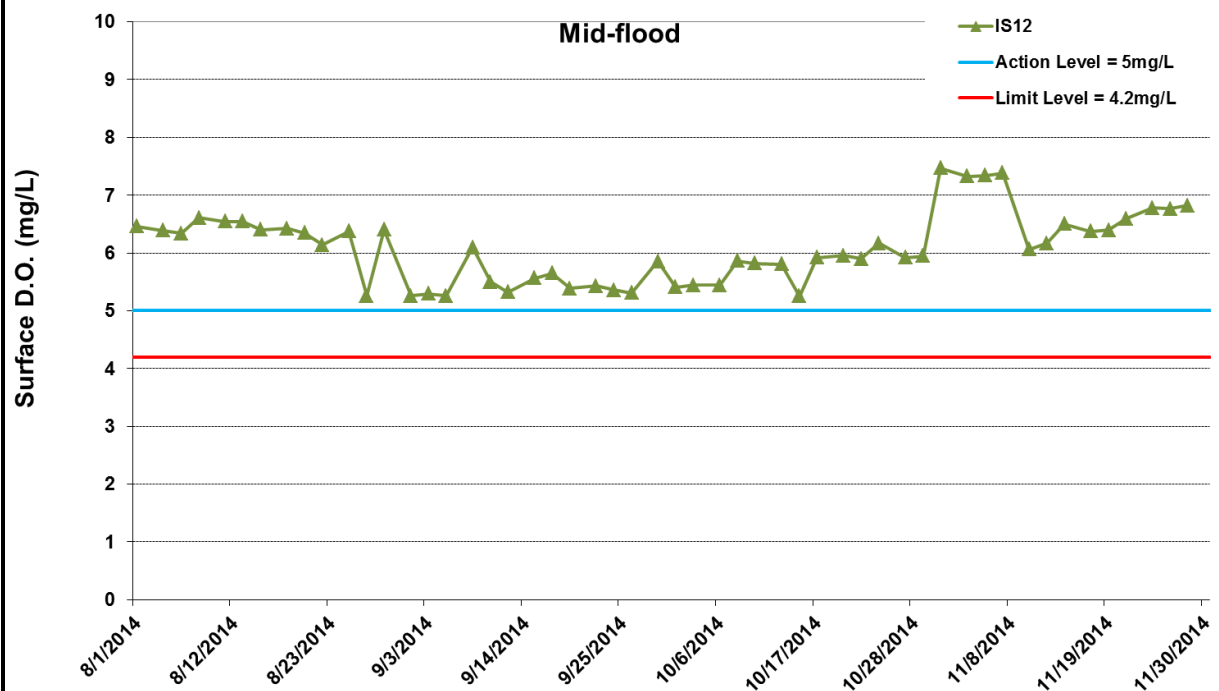
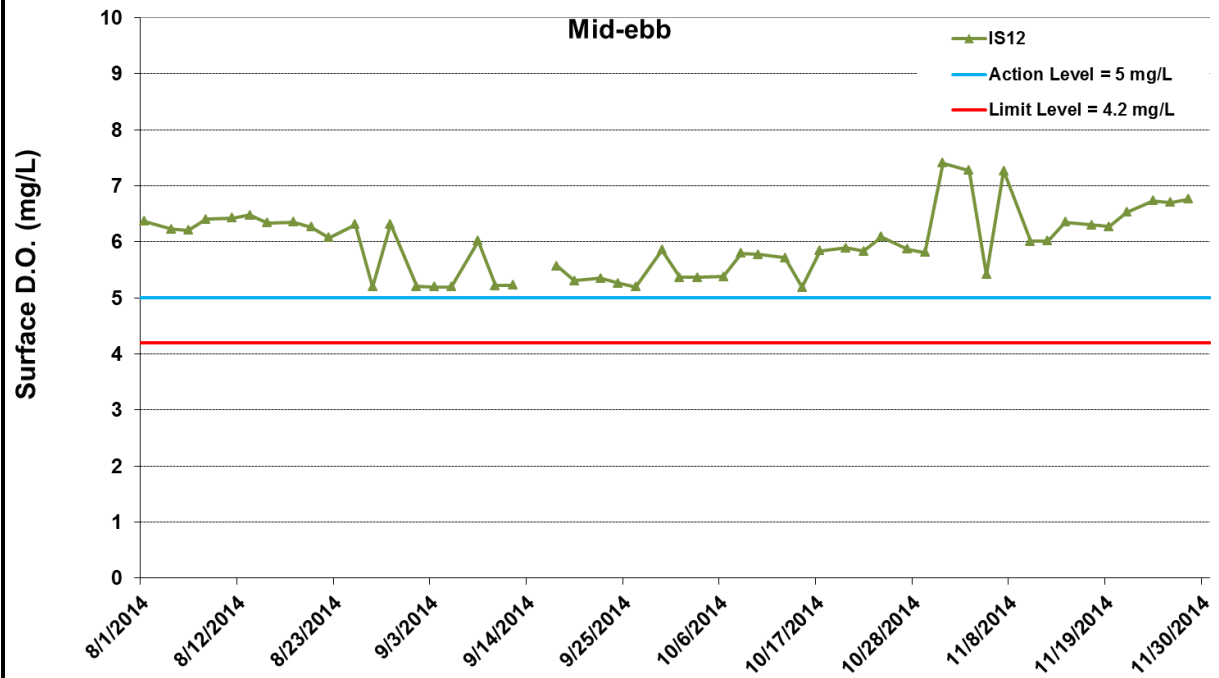


Figure I3 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



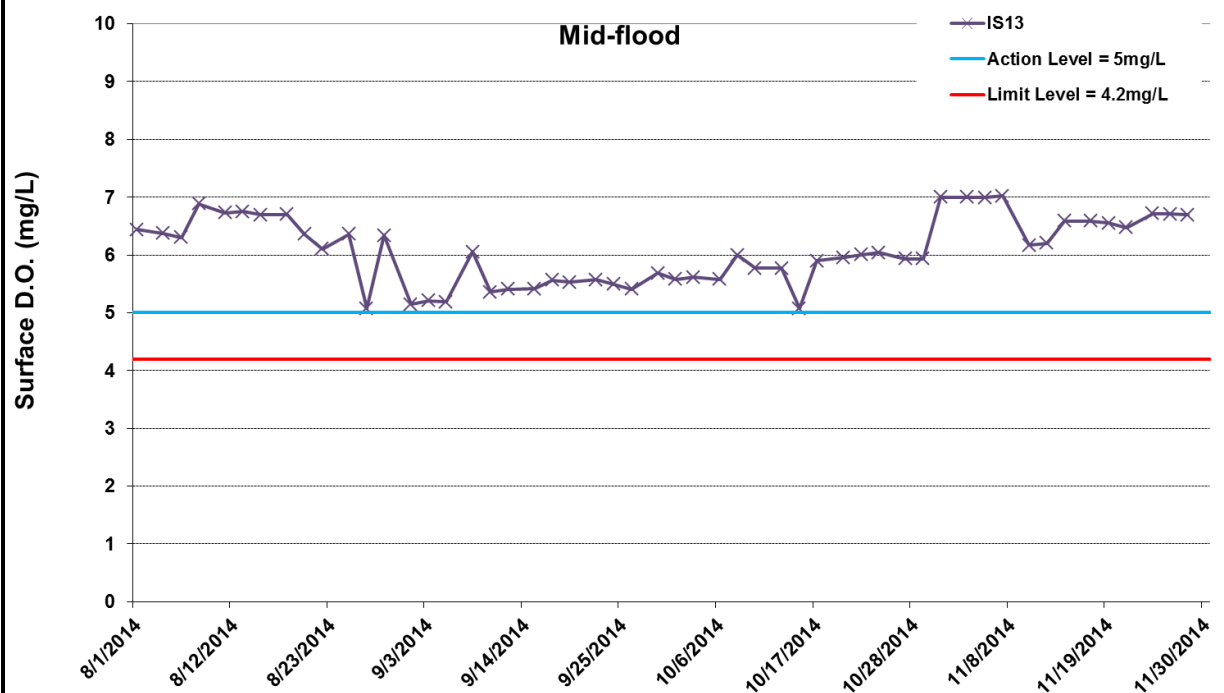
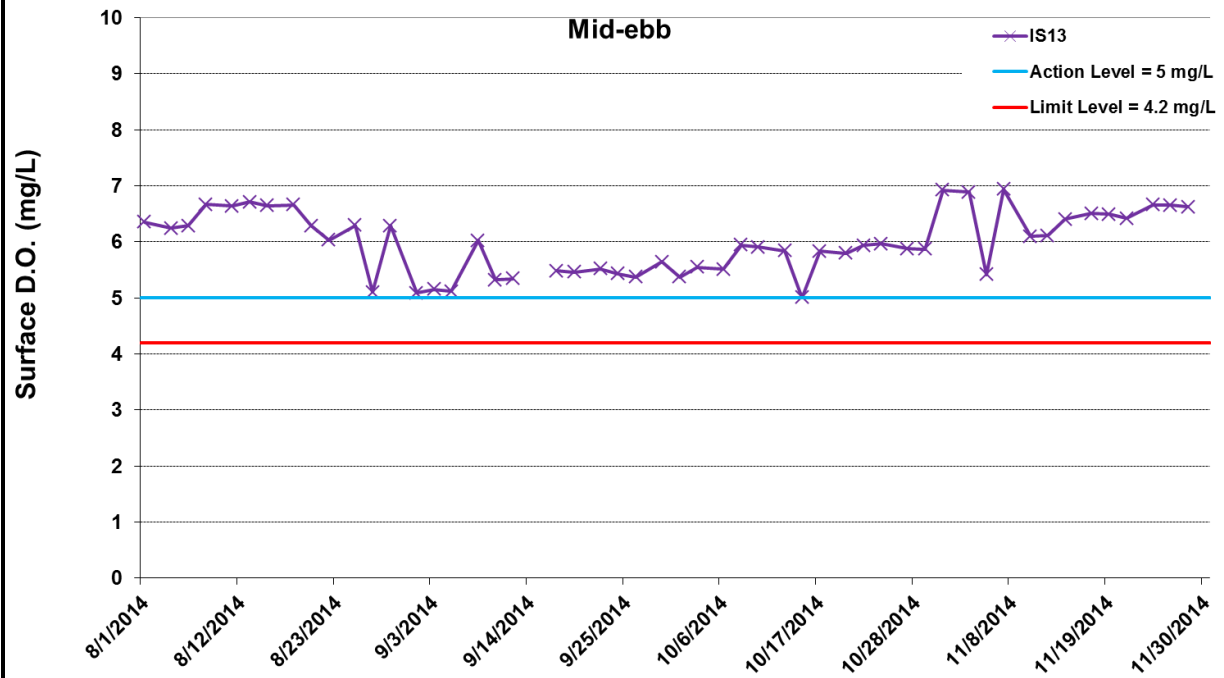


Figure I4 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



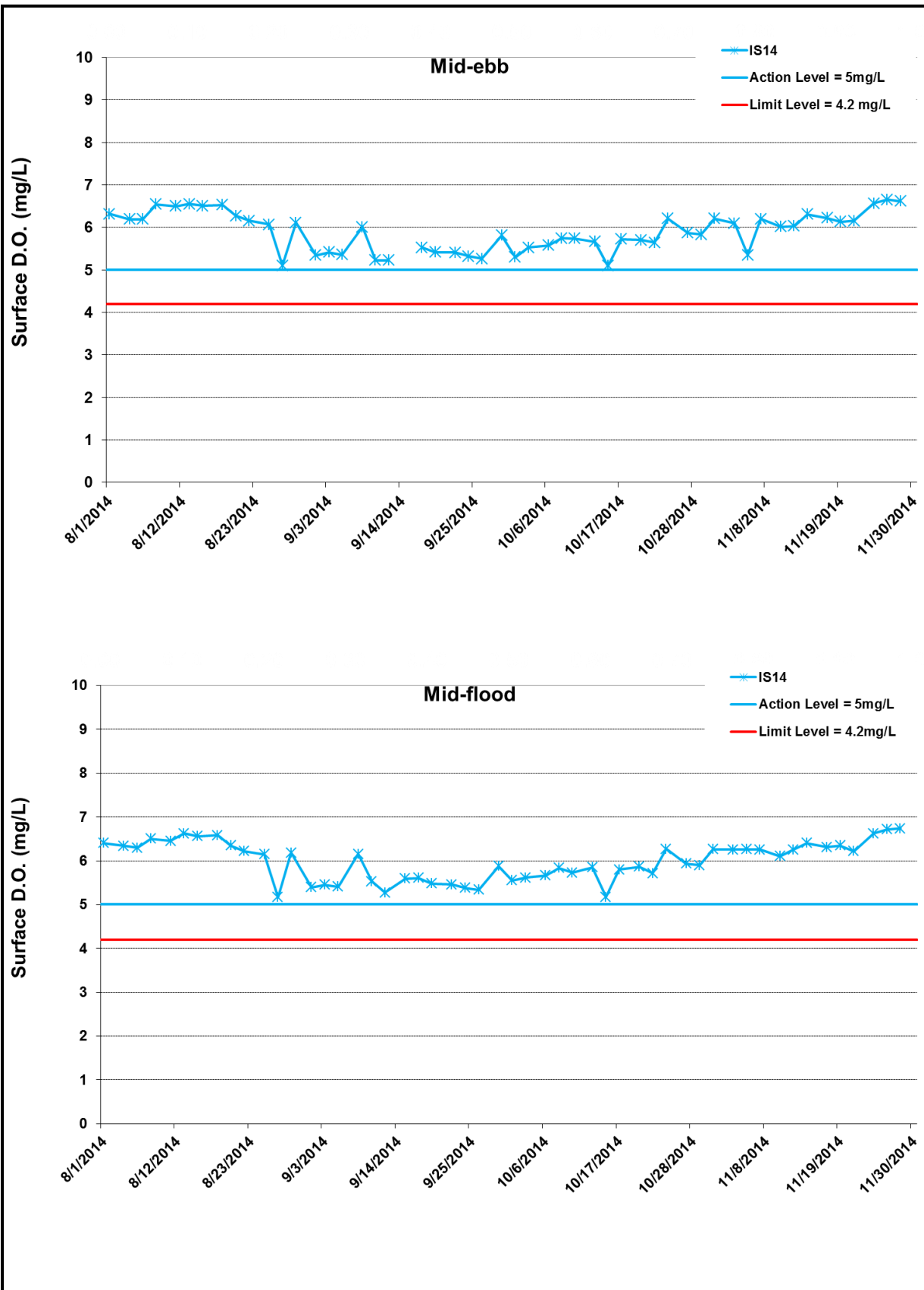
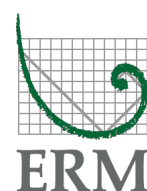


Figure I5 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



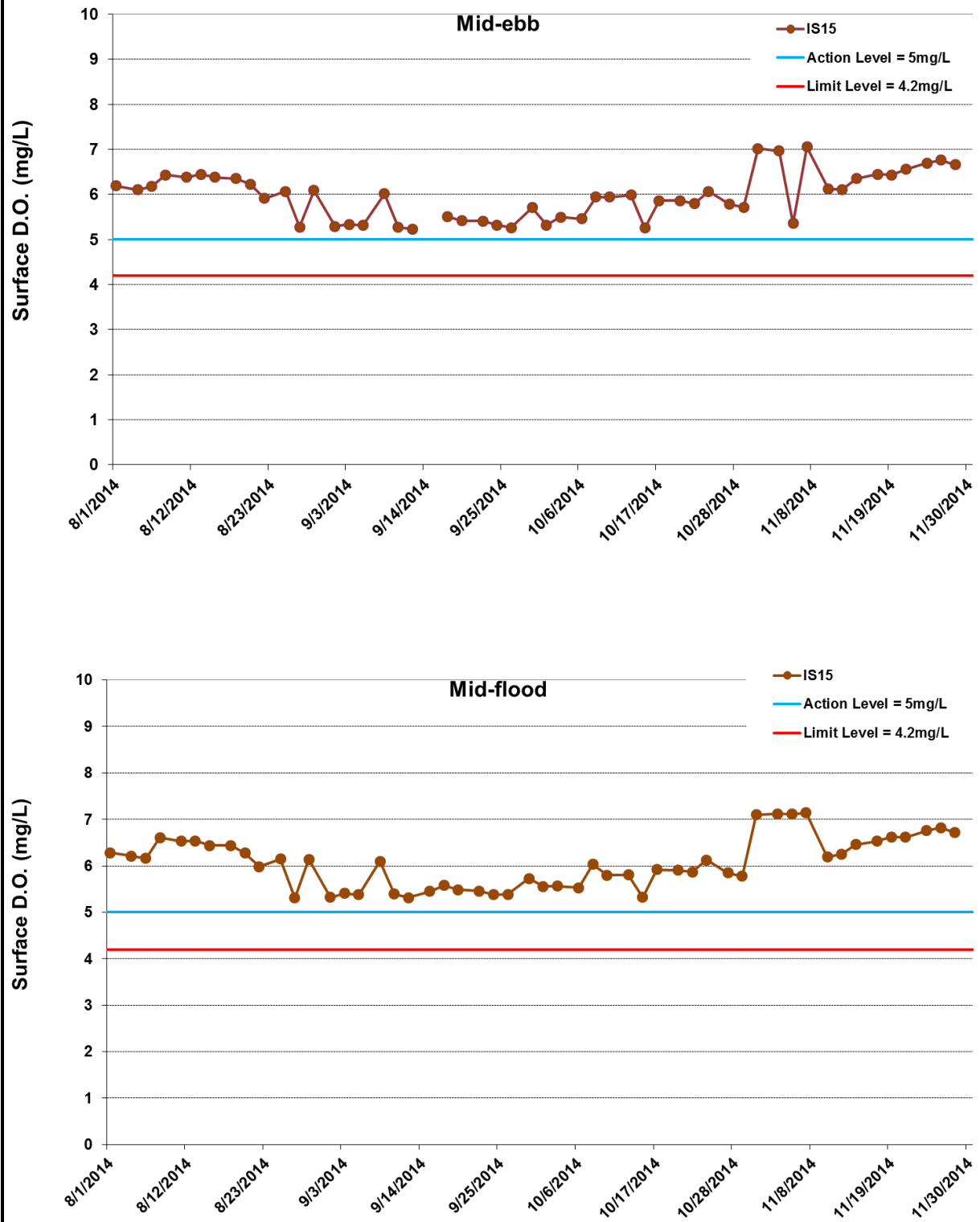


Figure I6 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



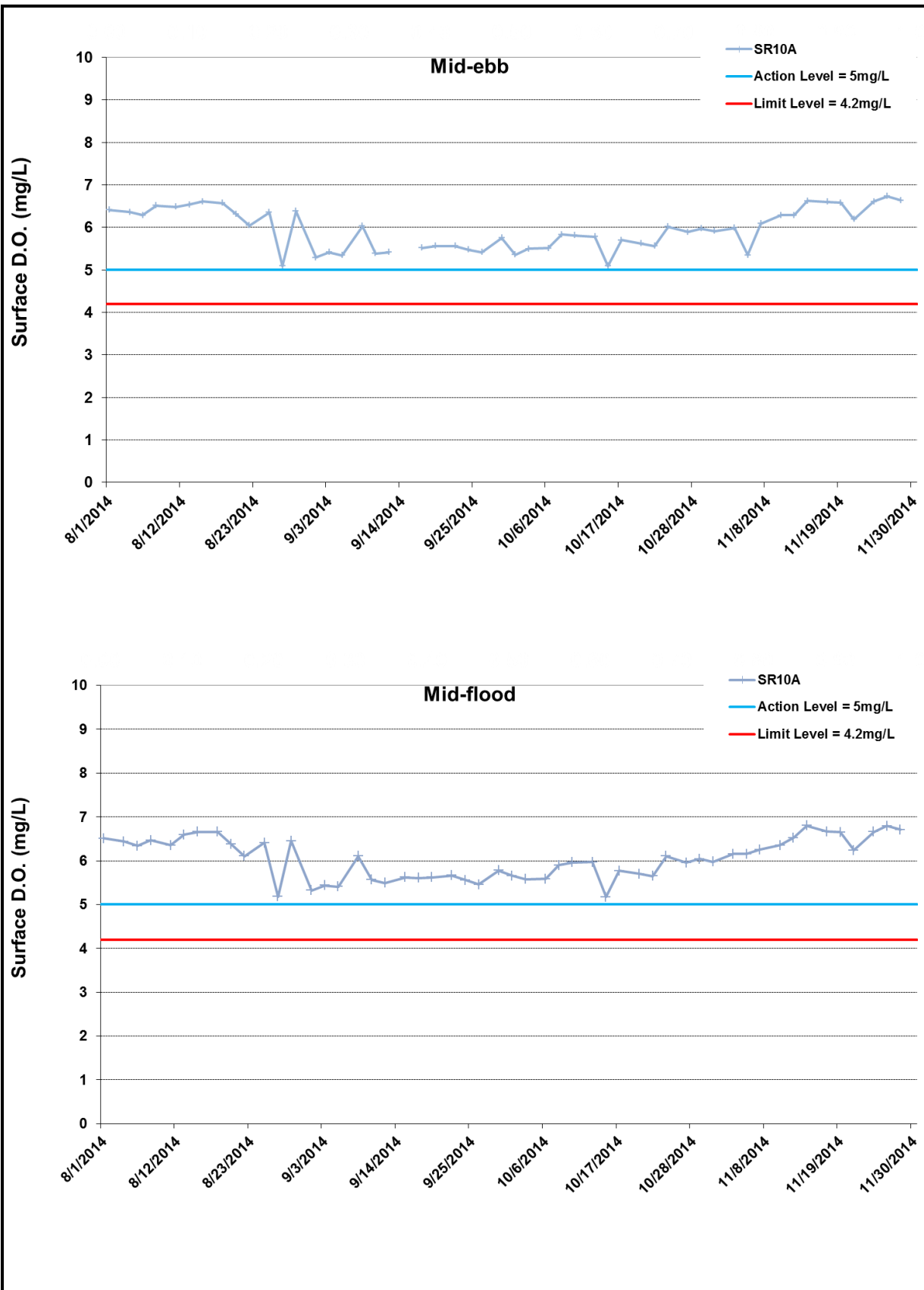
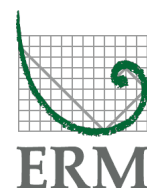


Figure I7 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather. Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



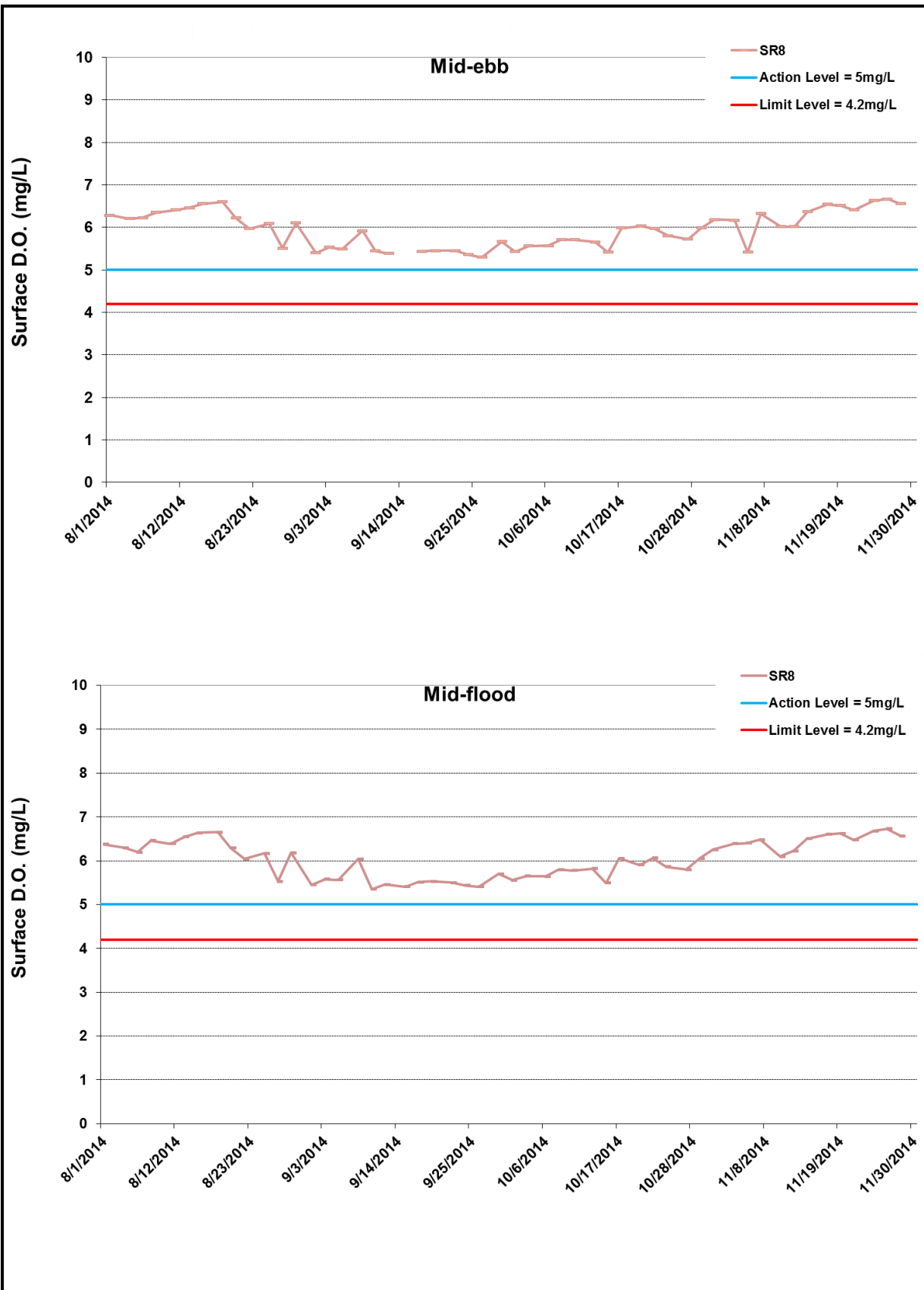


Figure I8 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



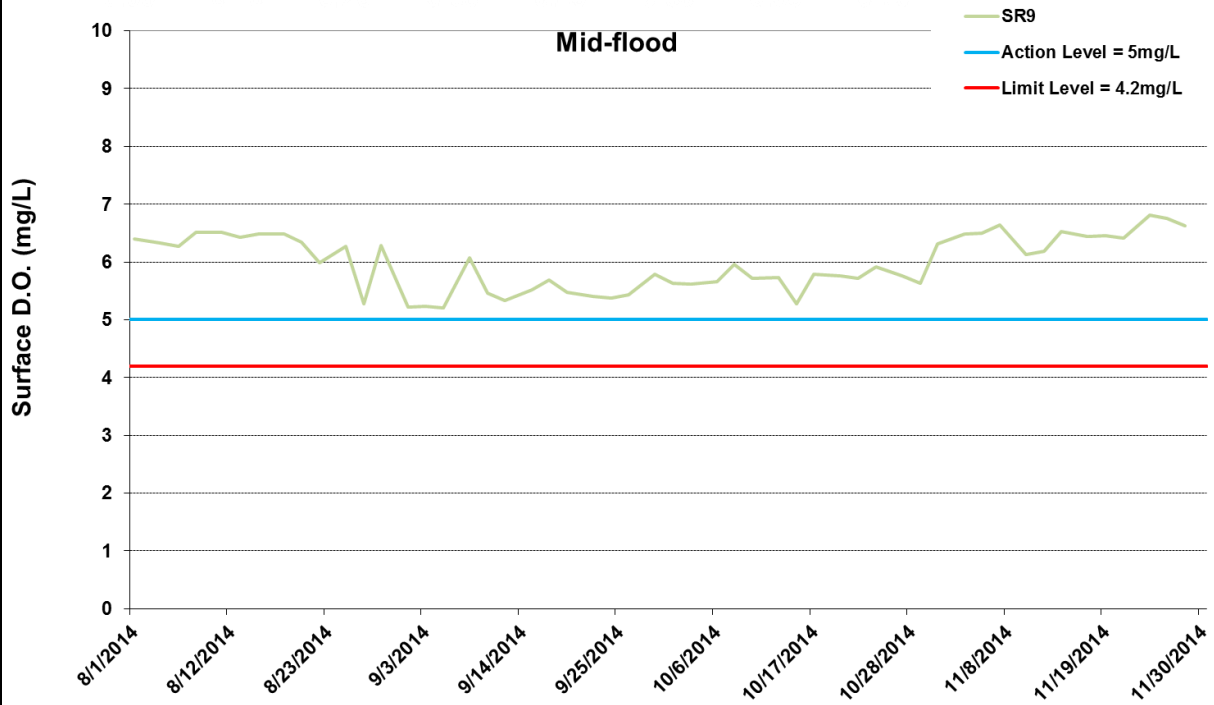
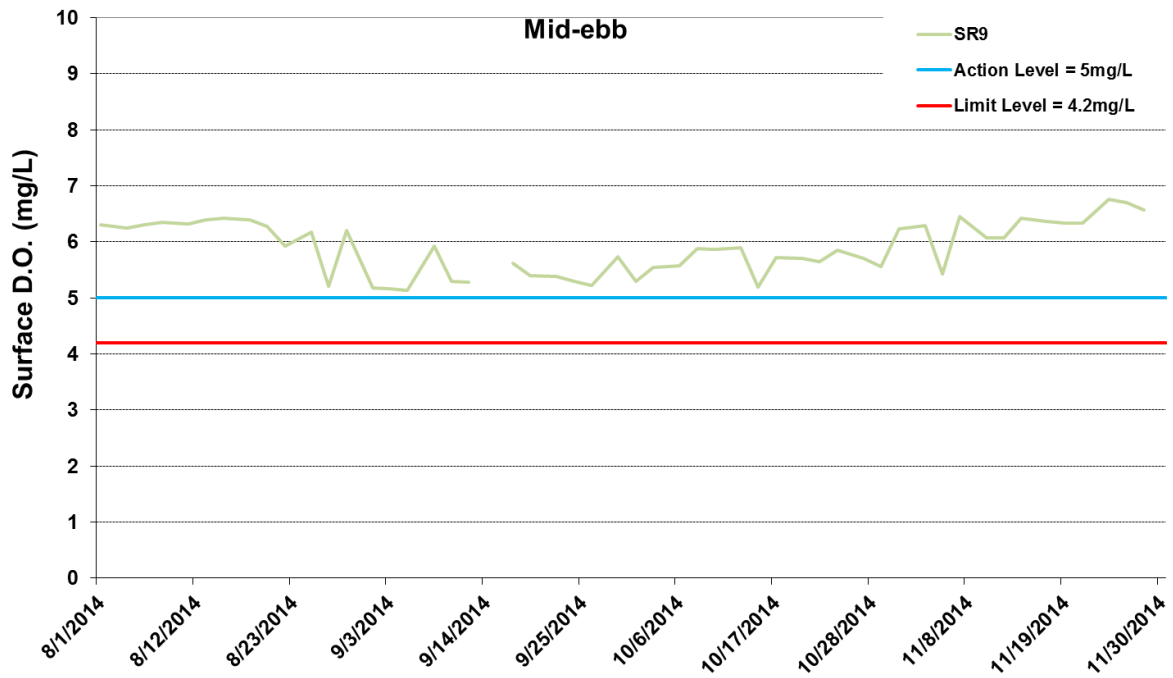
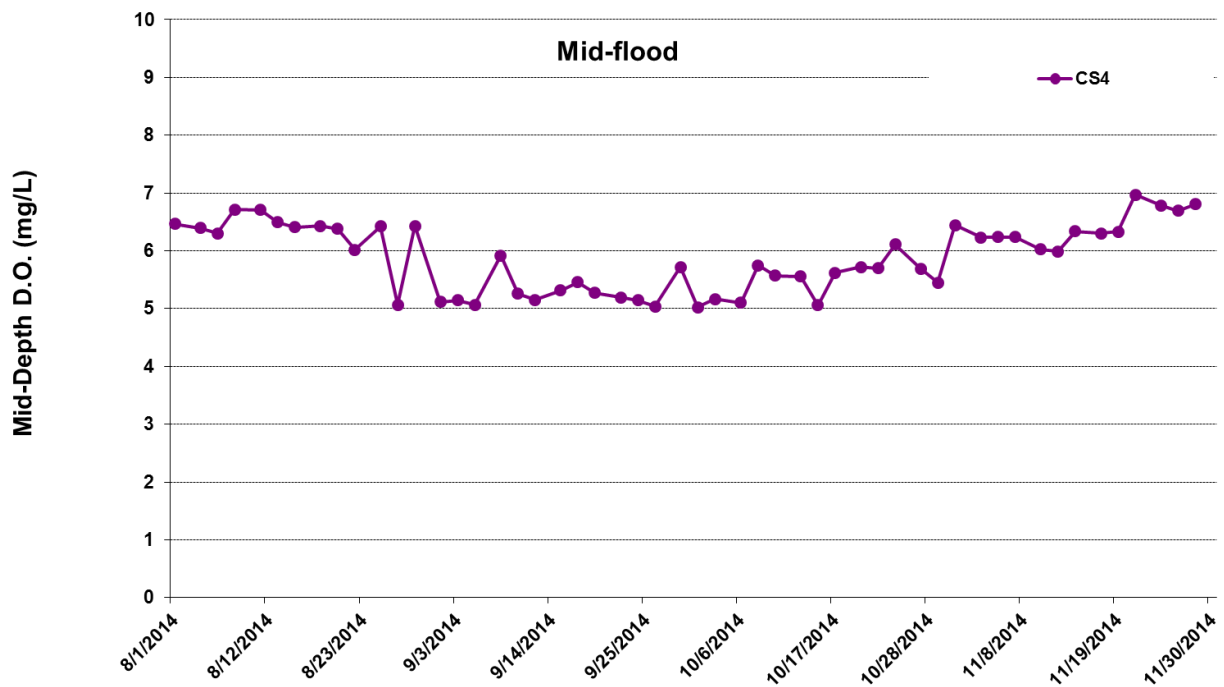
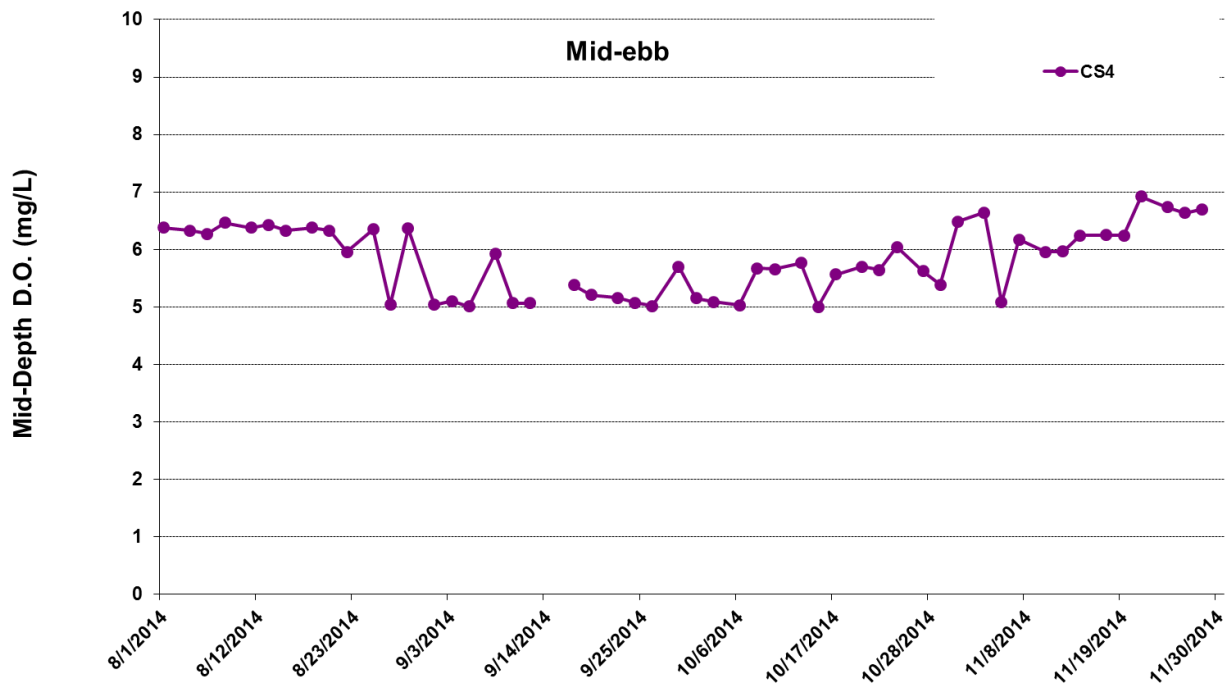


Figure I9 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 August 2014 and 30 November 2014 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls

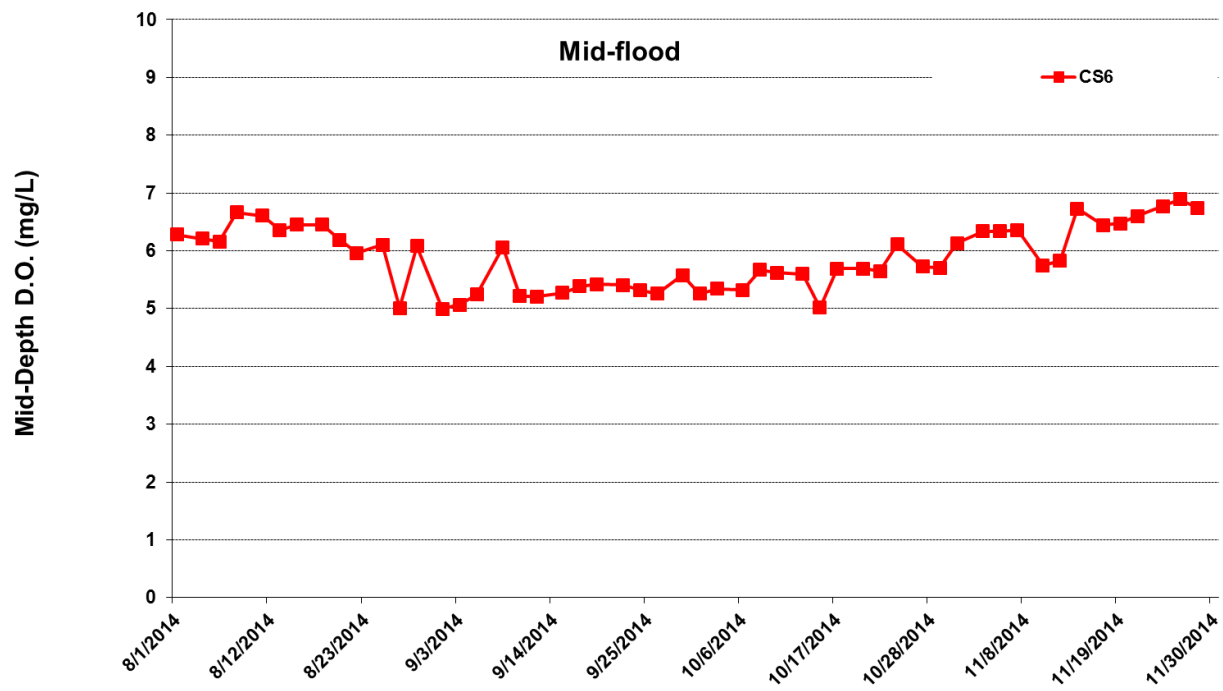
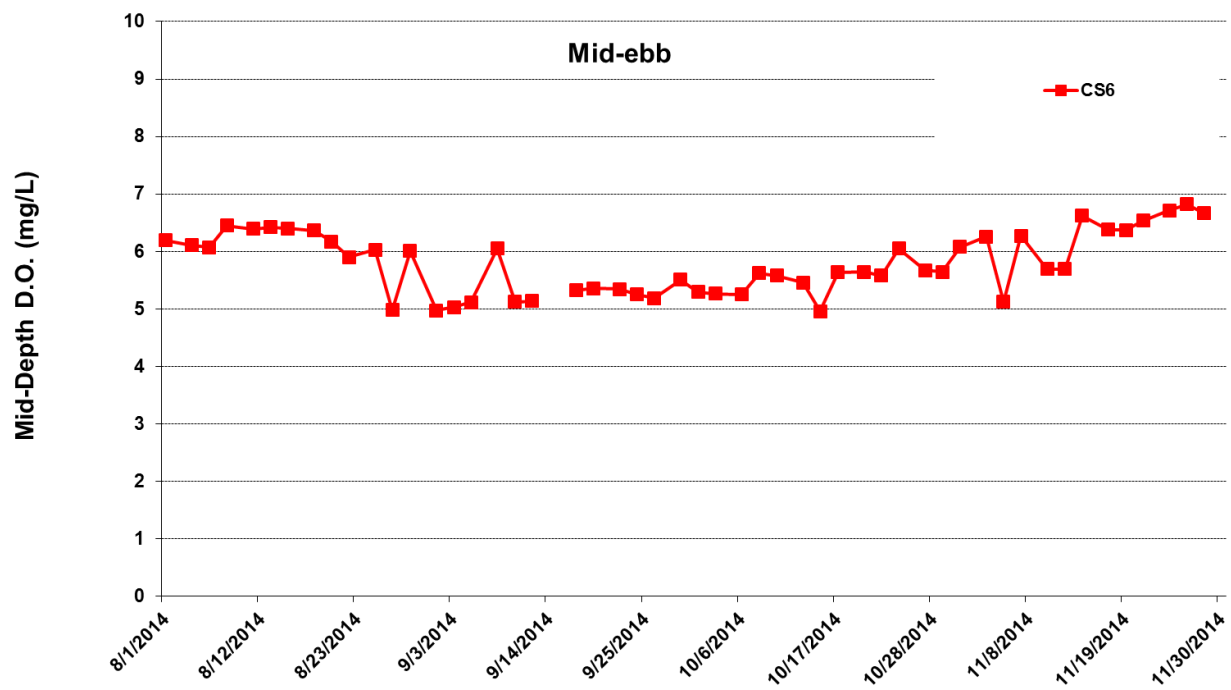




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I10 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 August 2014 and 30 November 2014 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

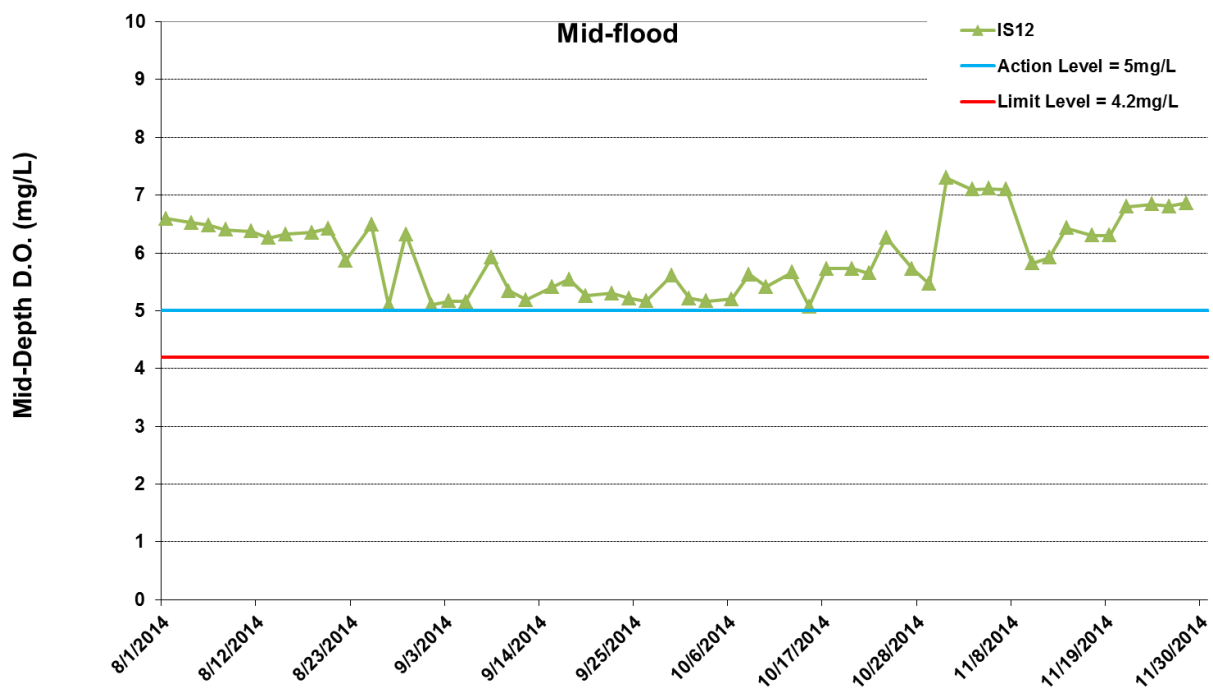
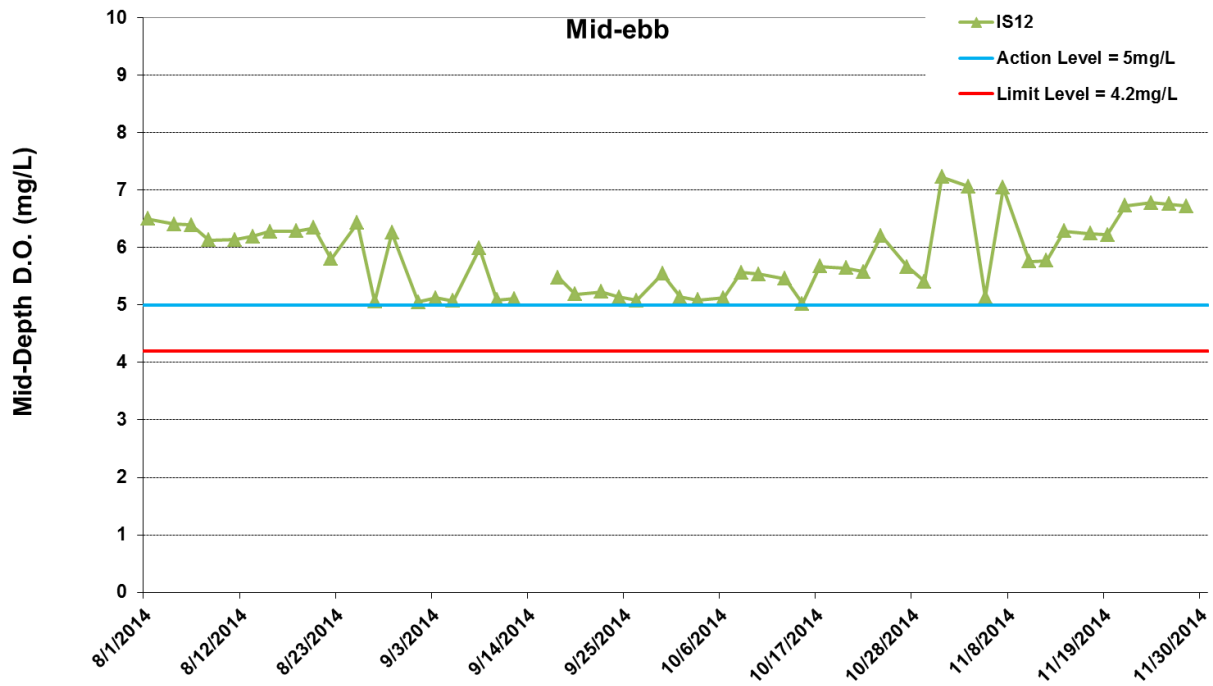




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I11 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 August 2014 and 30 November 2014 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

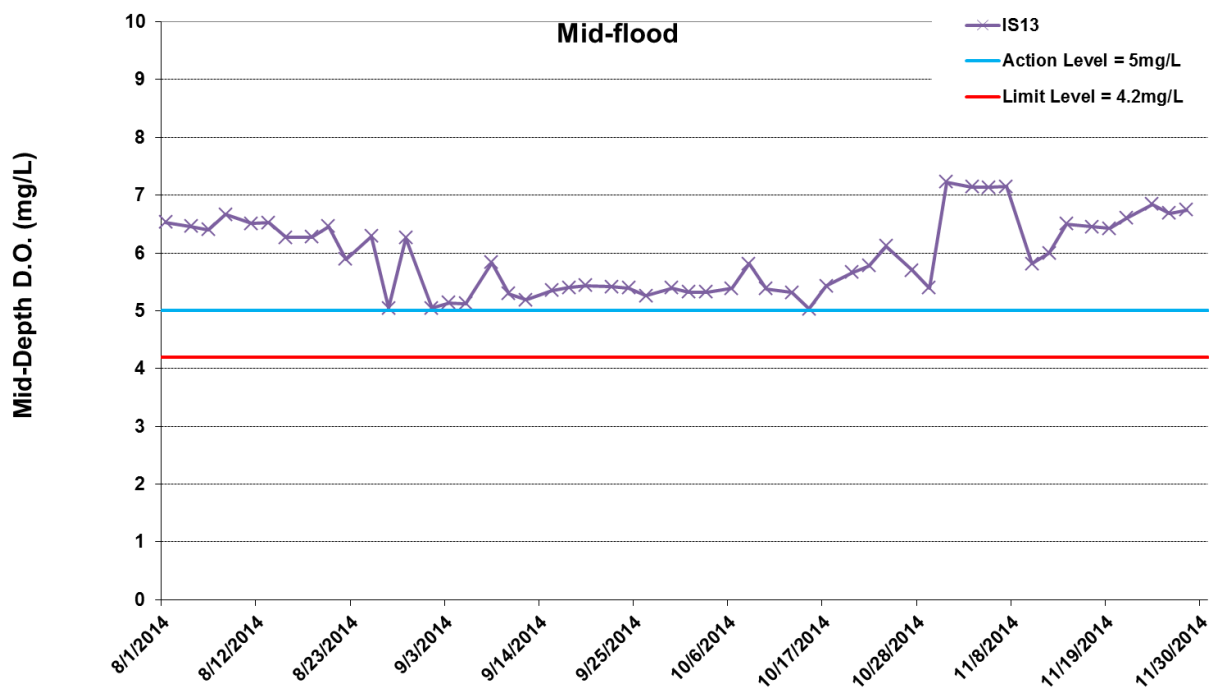
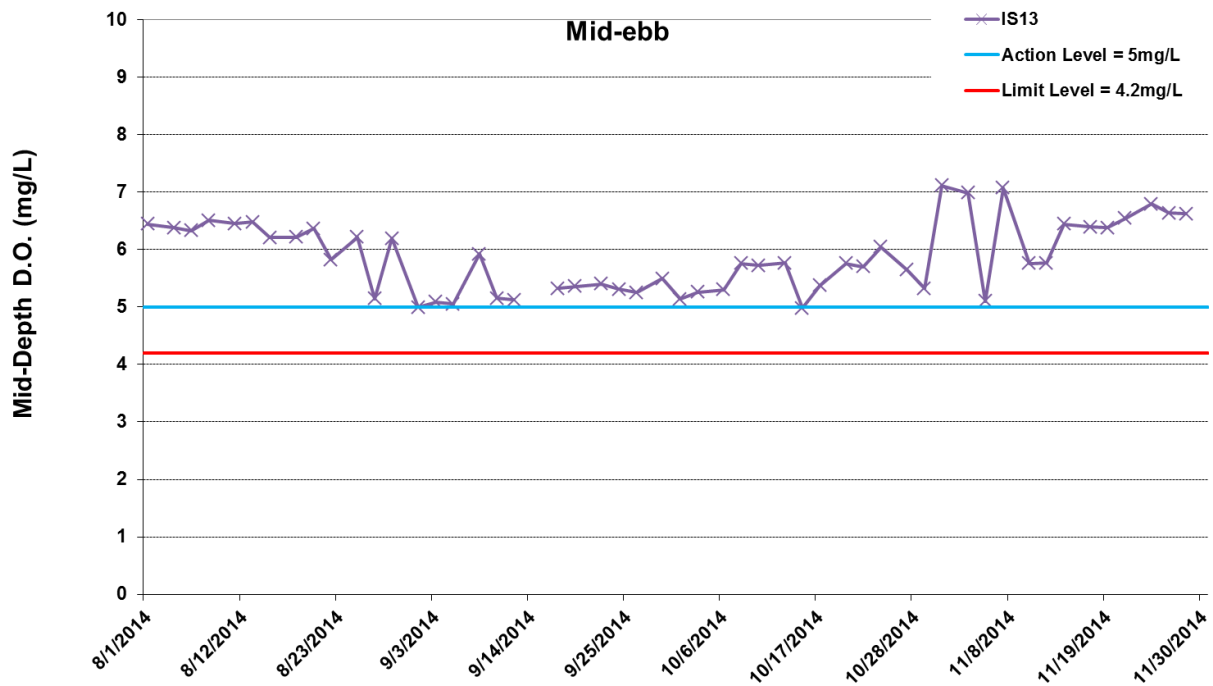




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I12 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 August 2014 and 30 November 2014 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

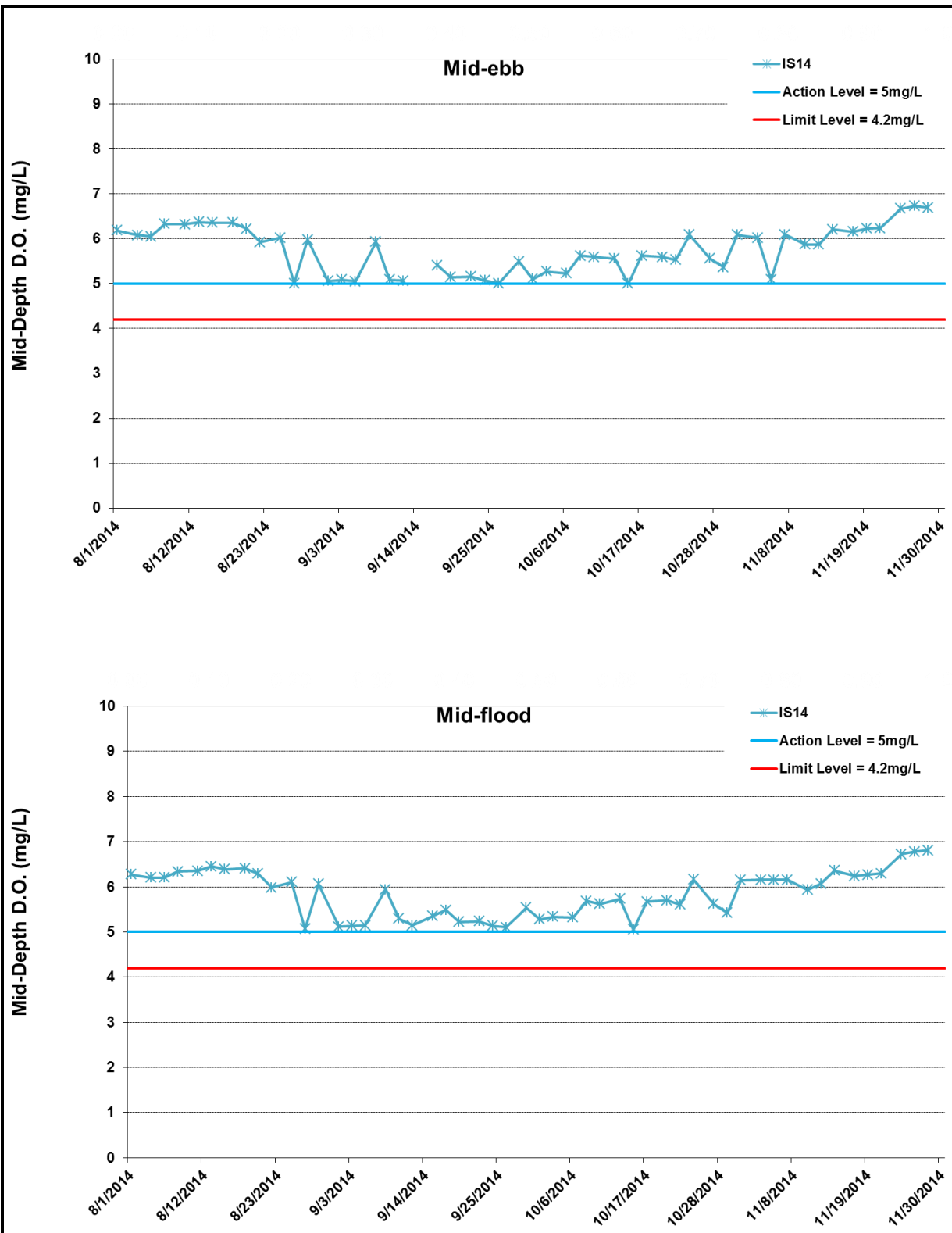




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I13 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 August 2014 and 30 November 2014 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

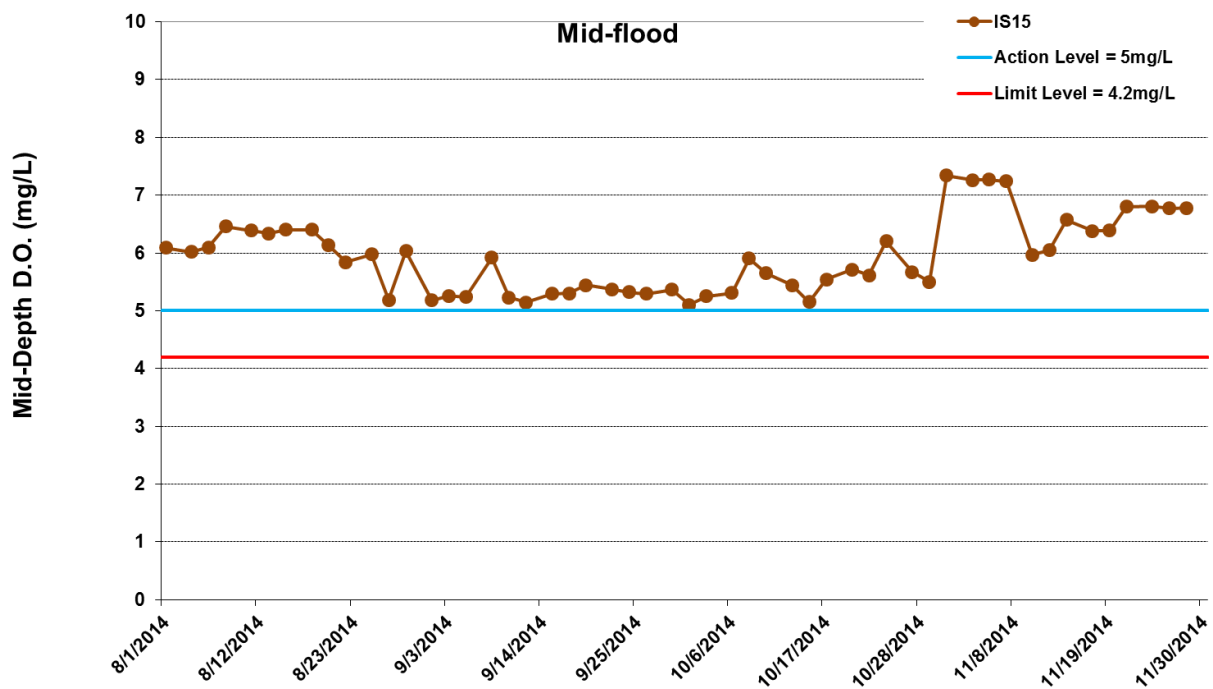
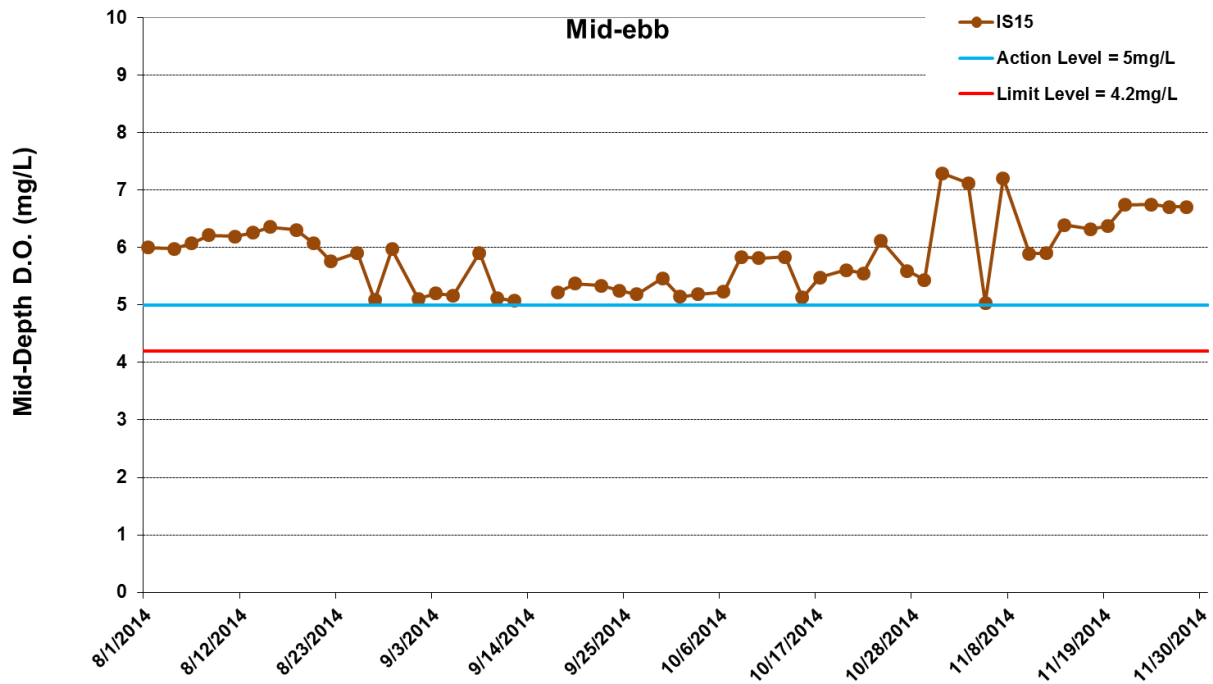




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I14 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 August 2014 and 30 November 2014 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

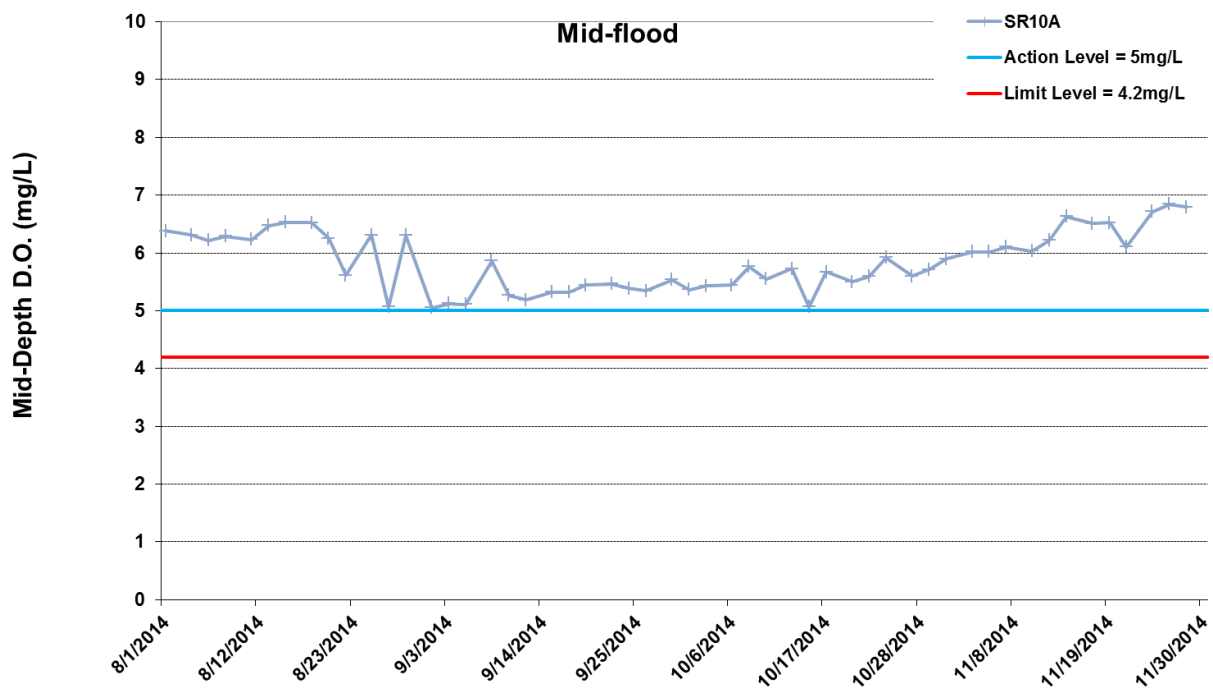
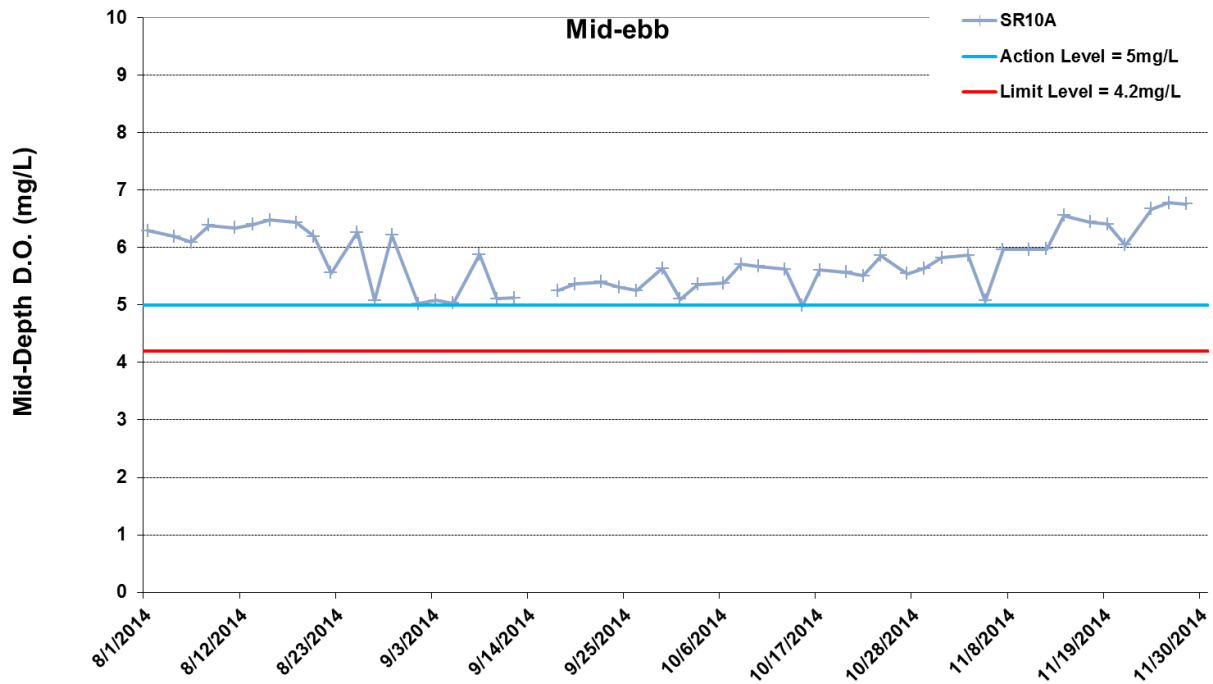




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I15 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 August 2014 and 30 November 2014 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.





*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 August 2014 and 30 November 2014 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



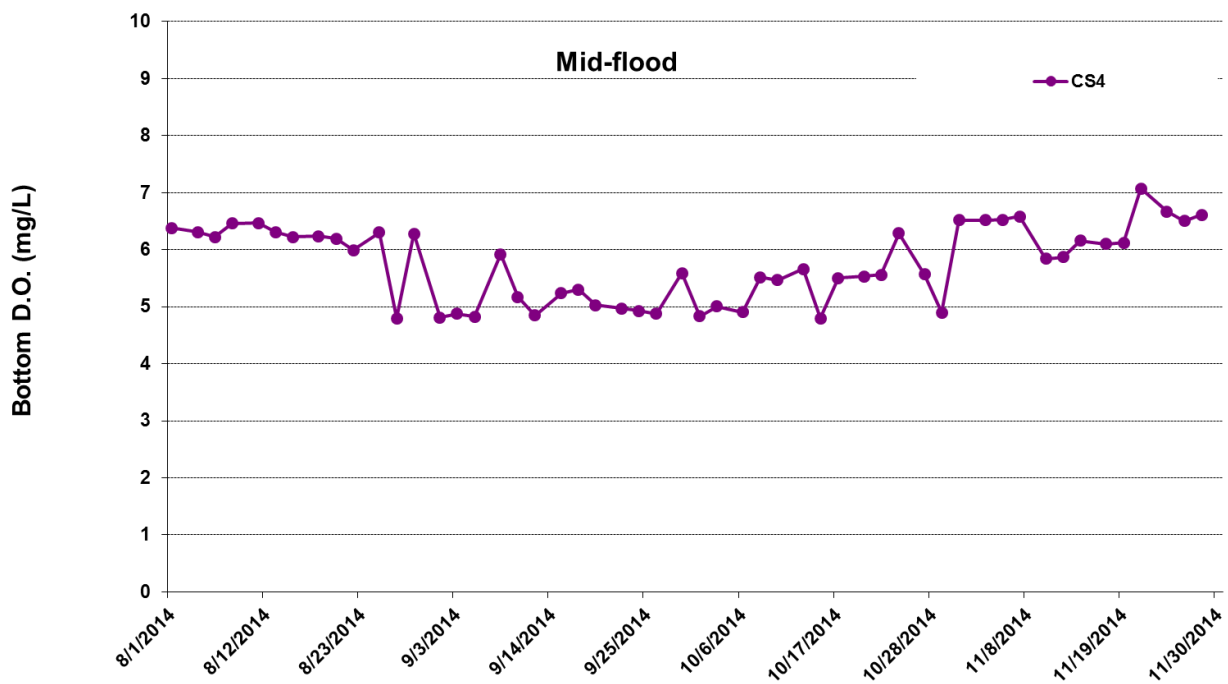
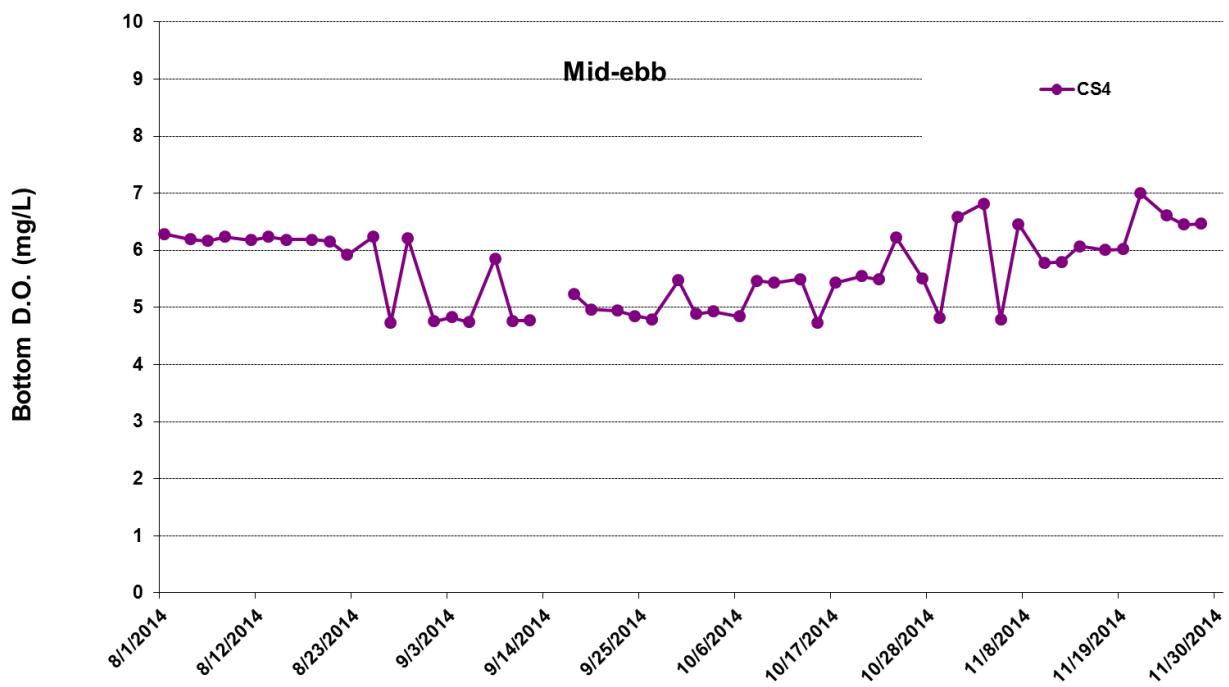


Figure I17 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



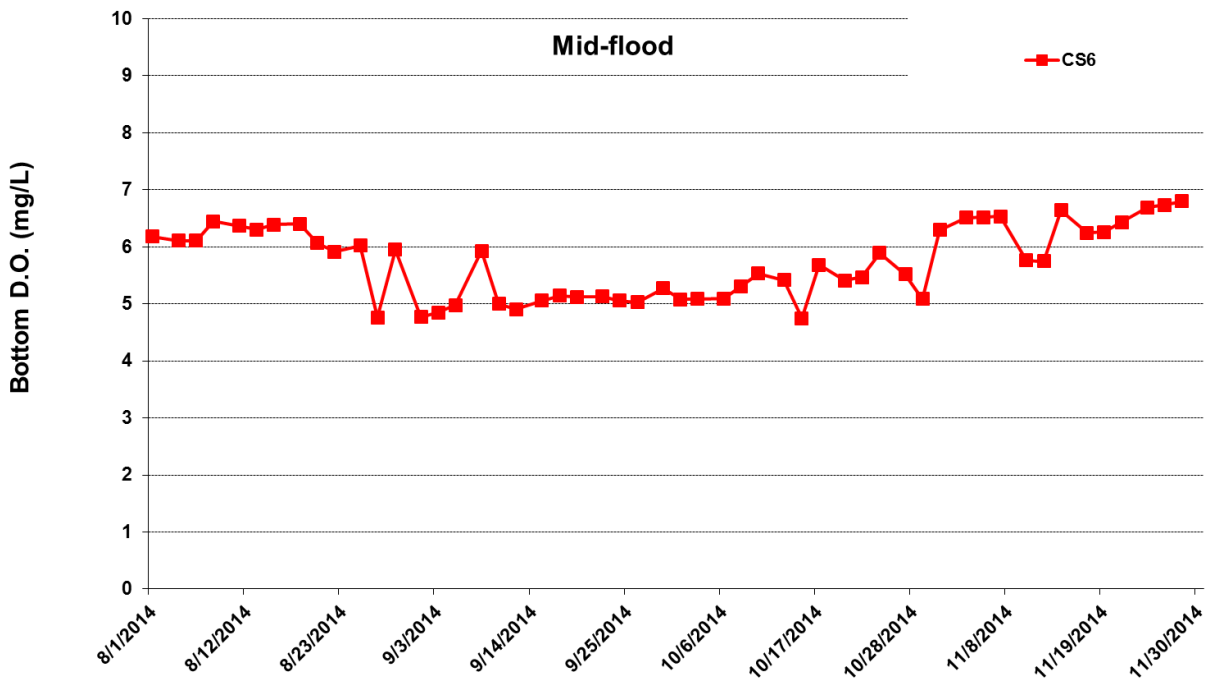
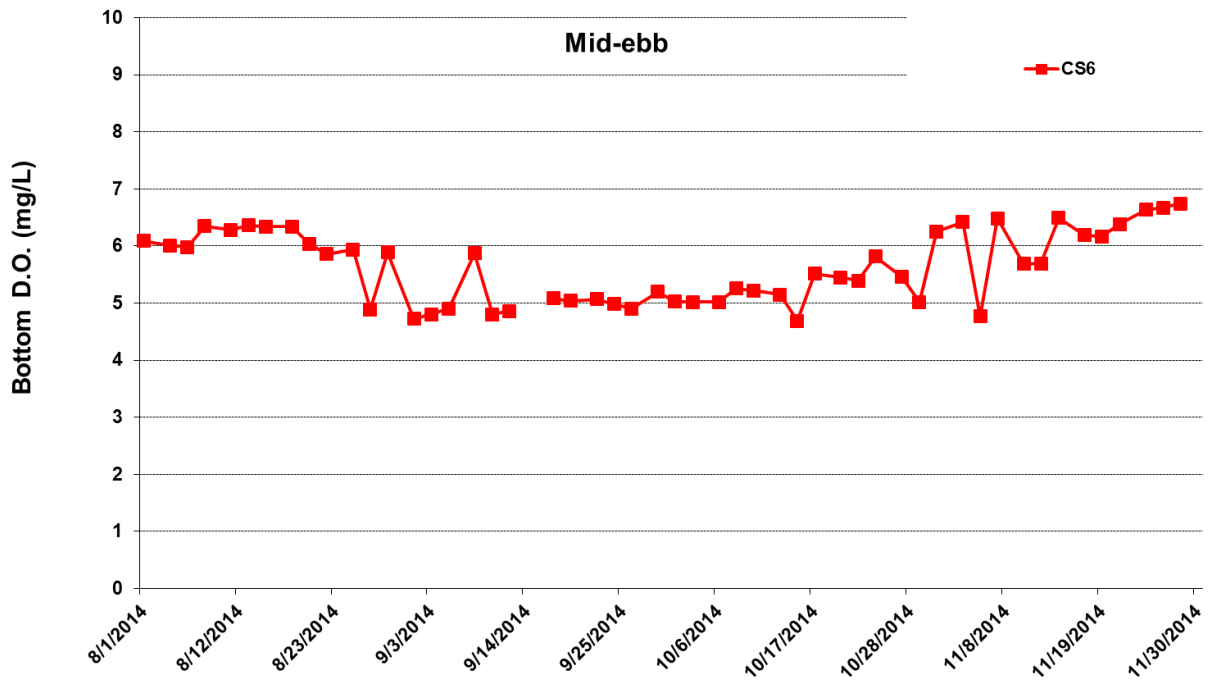


Figure I18 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



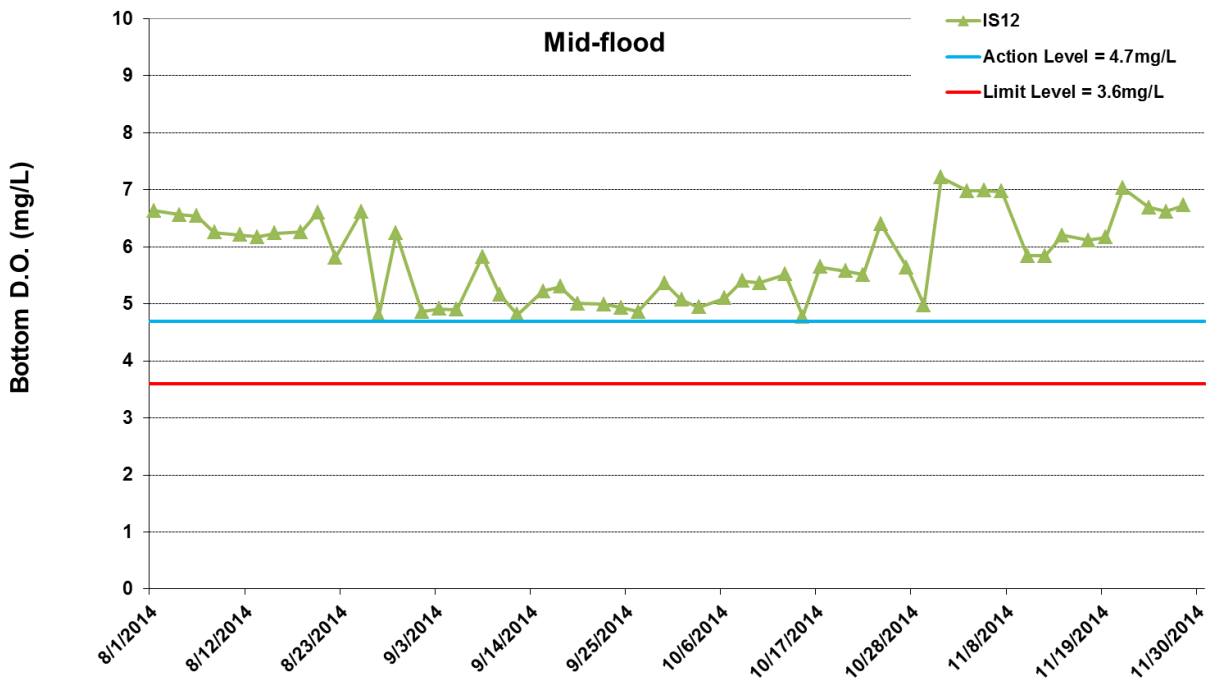
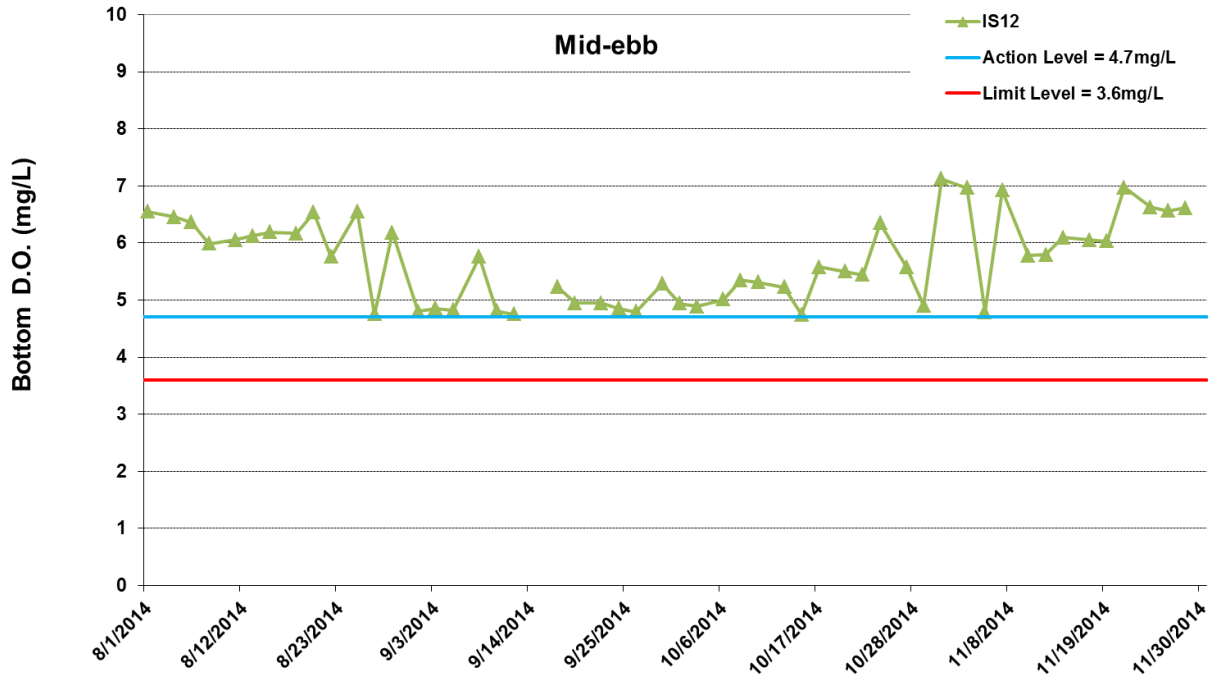


Figure I19 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



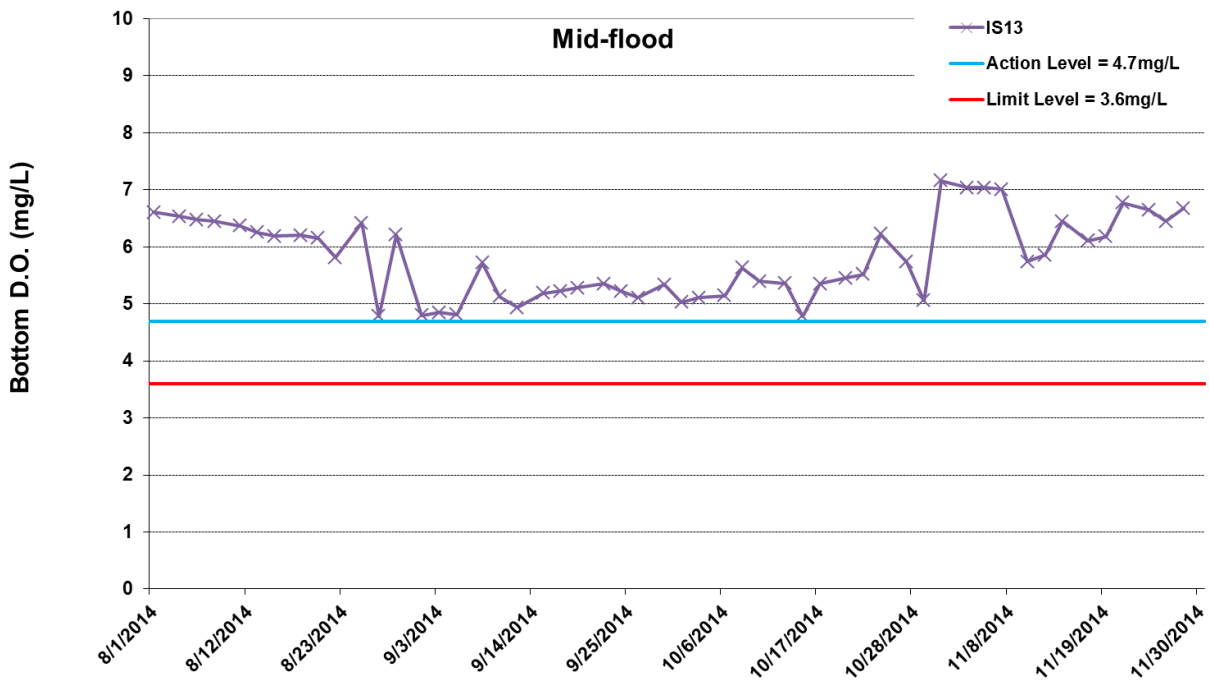
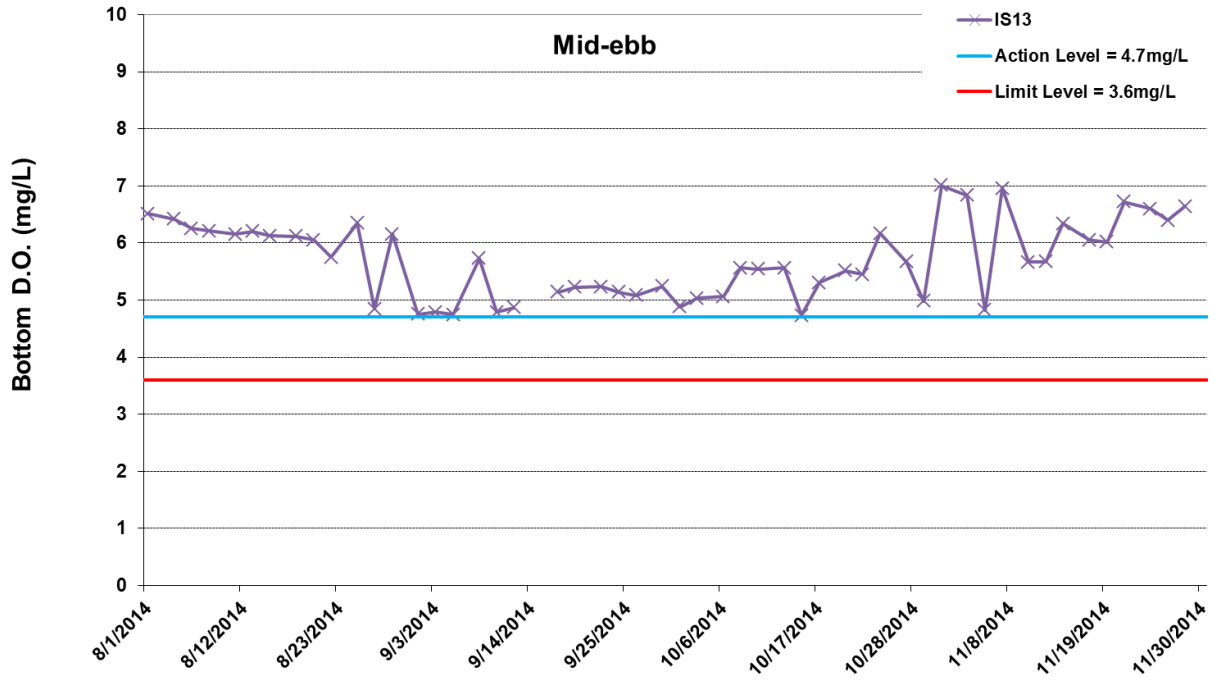


Figure I20 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



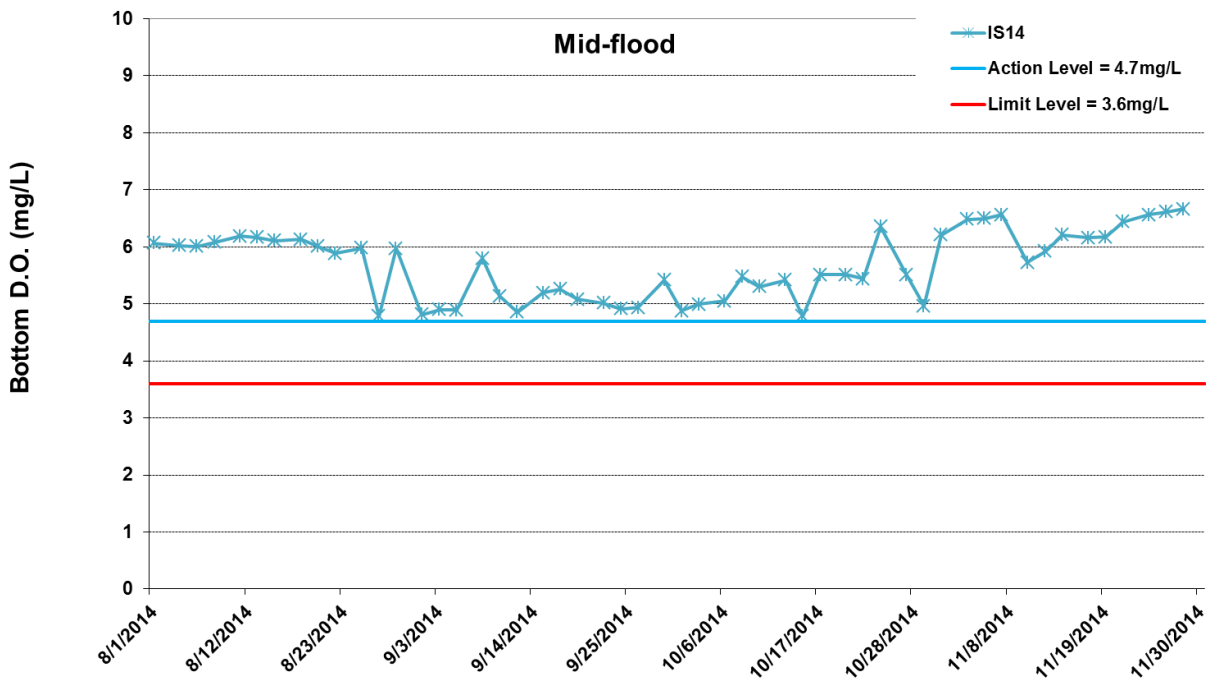
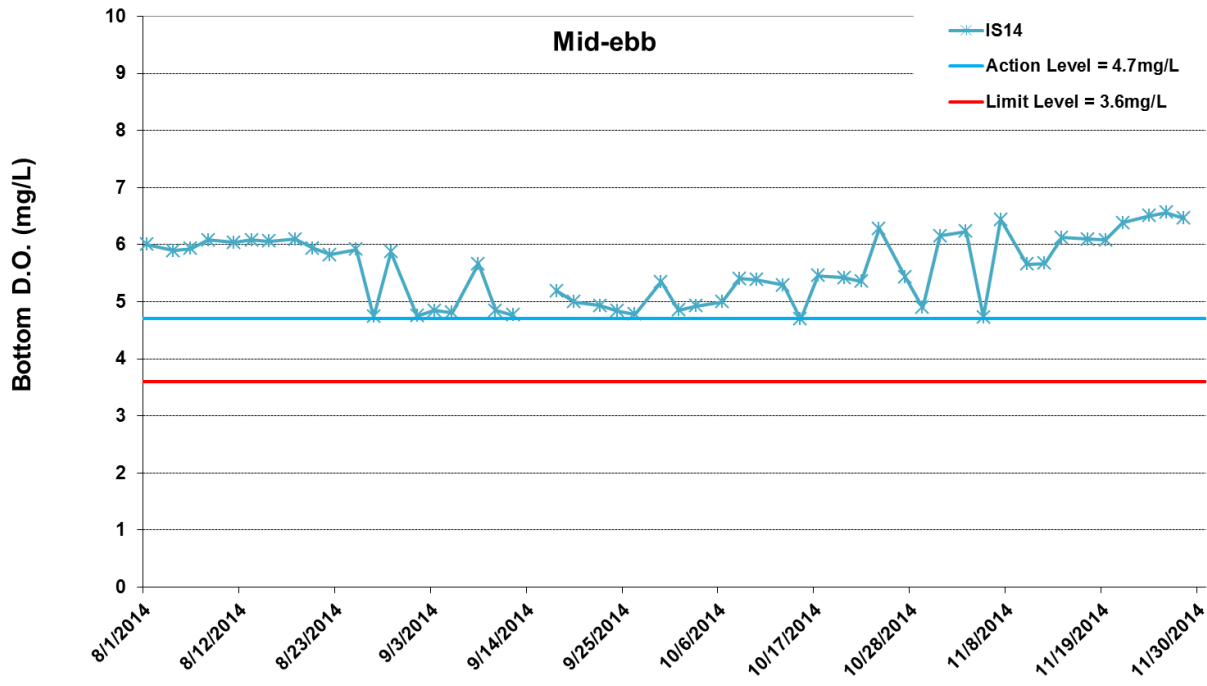


Figure I21 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



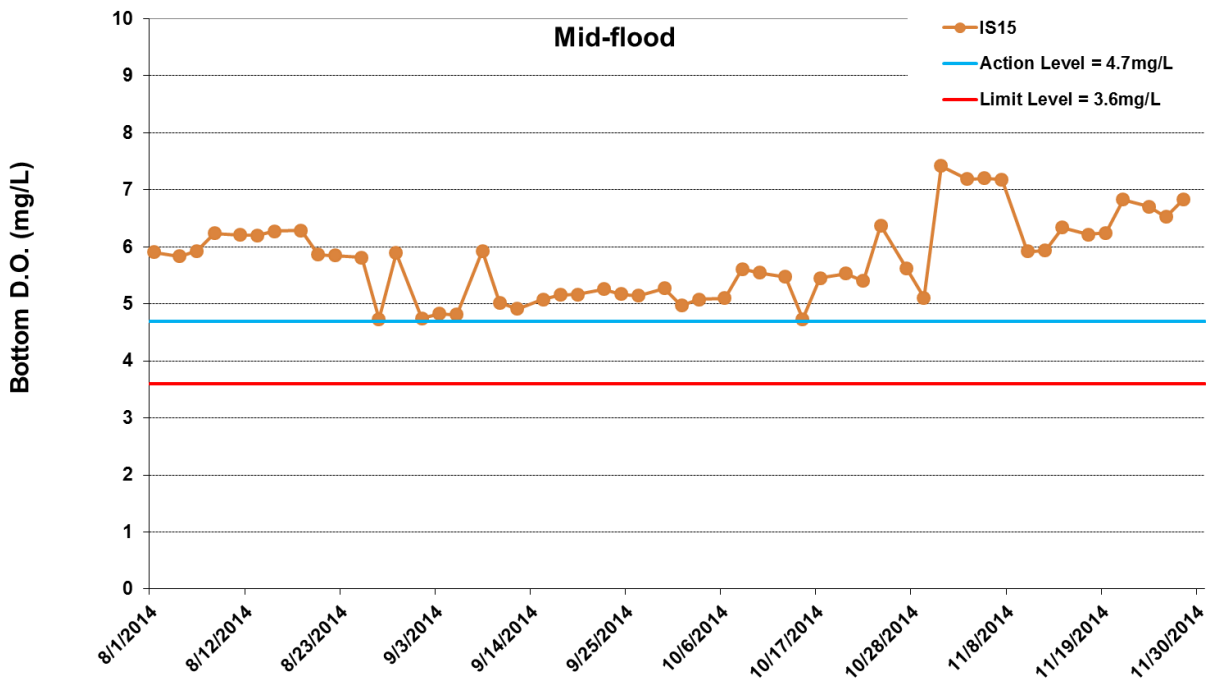
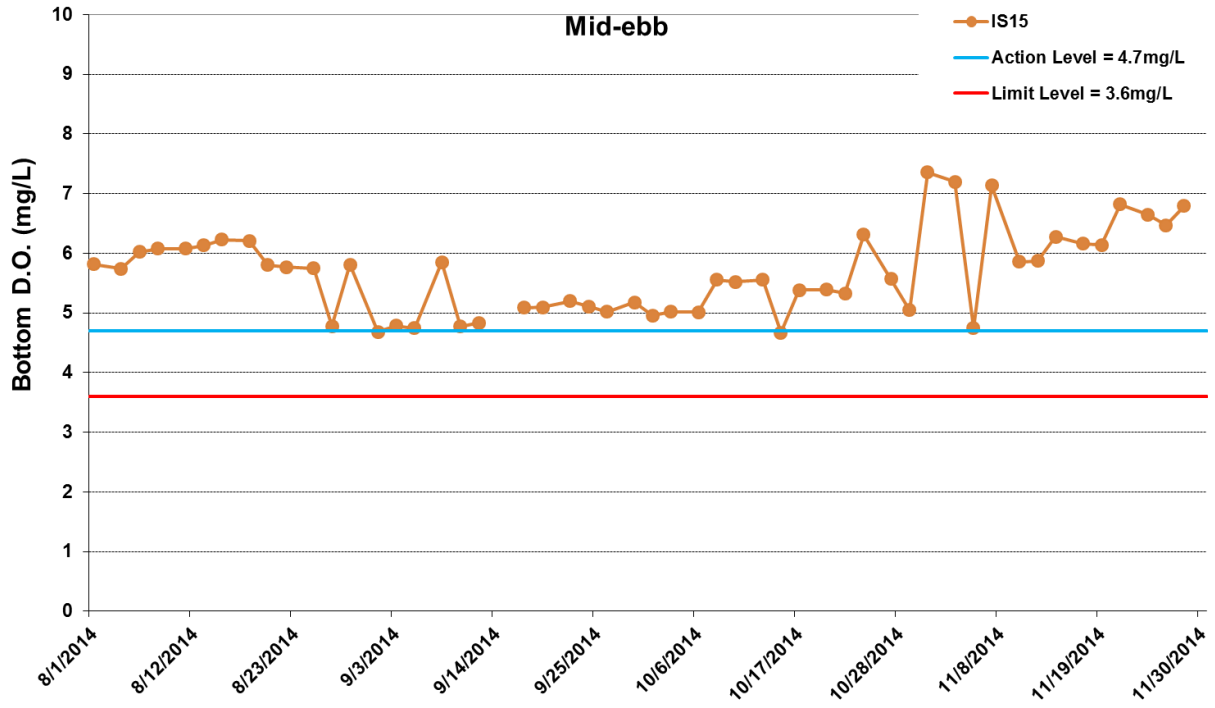


Figure I22 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



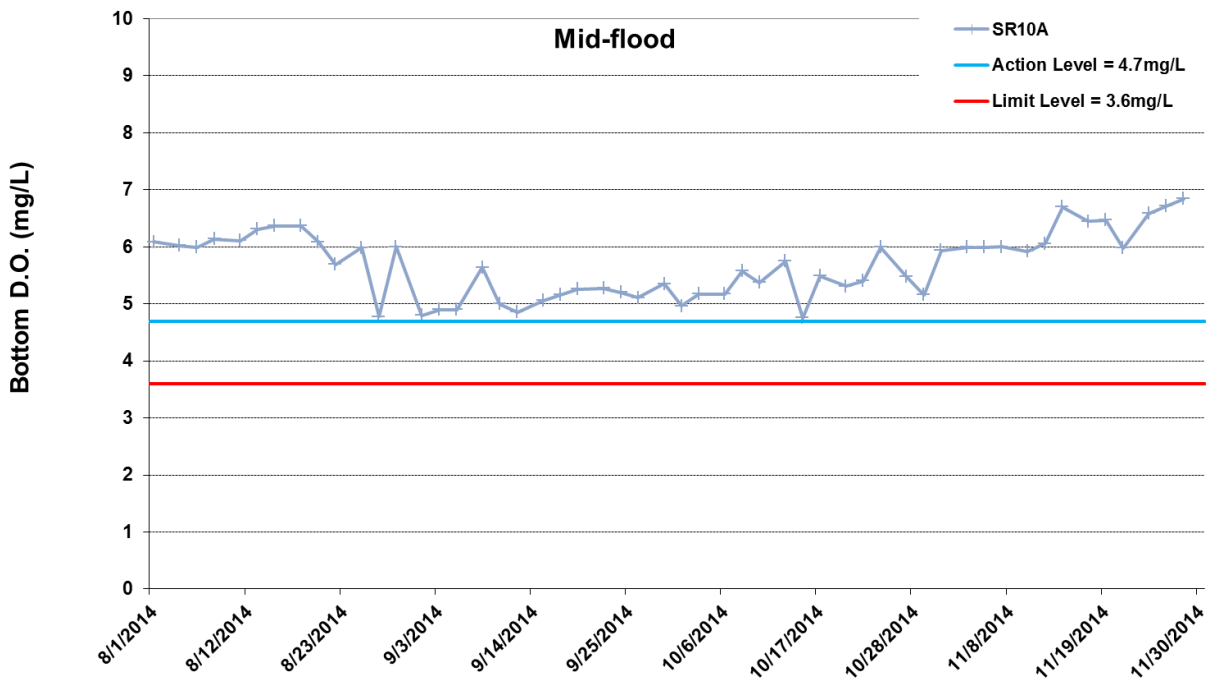
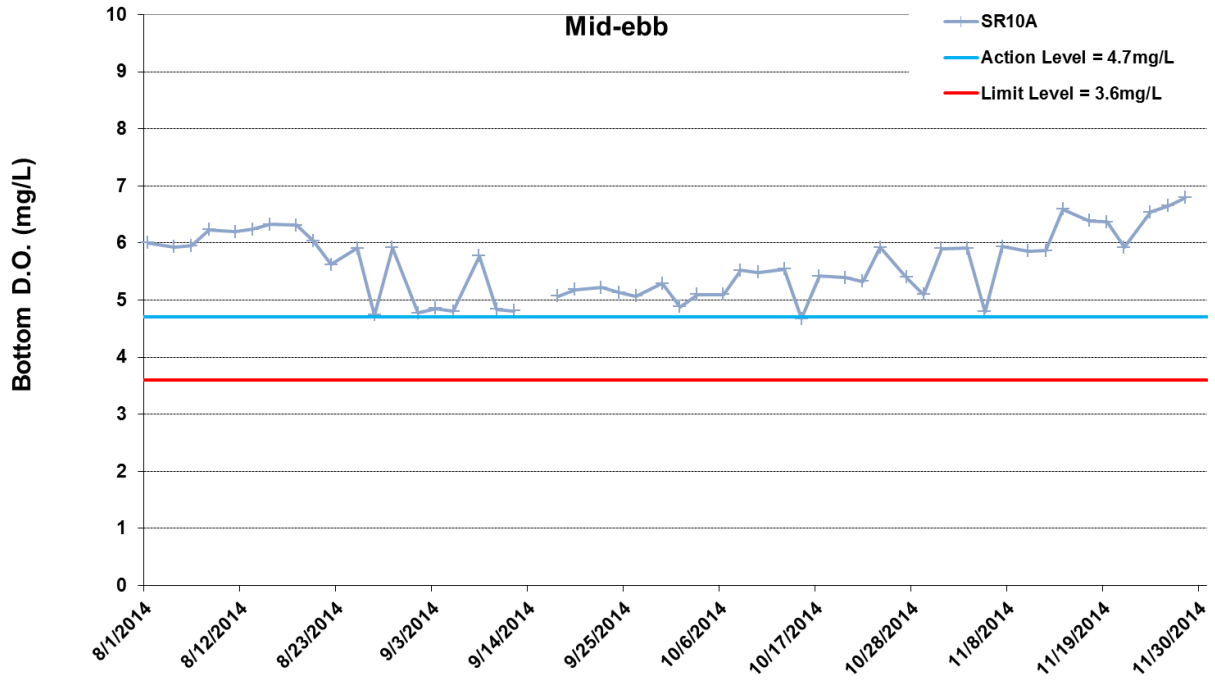


Figure I23 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



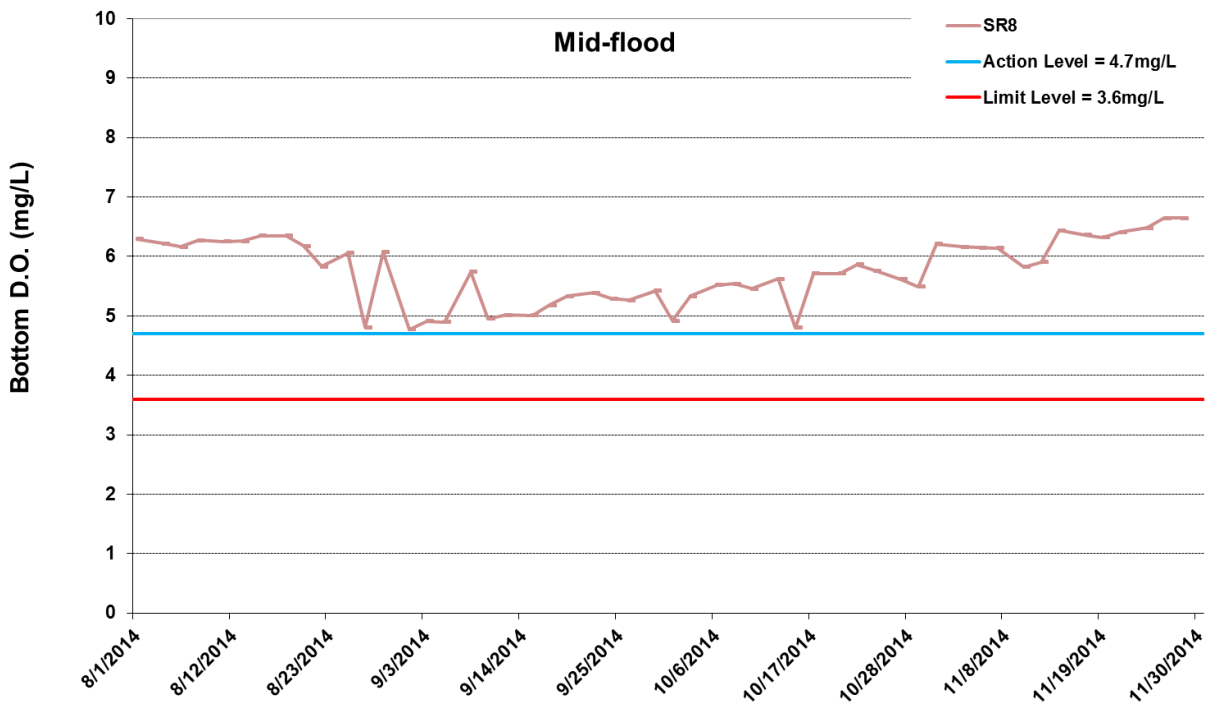
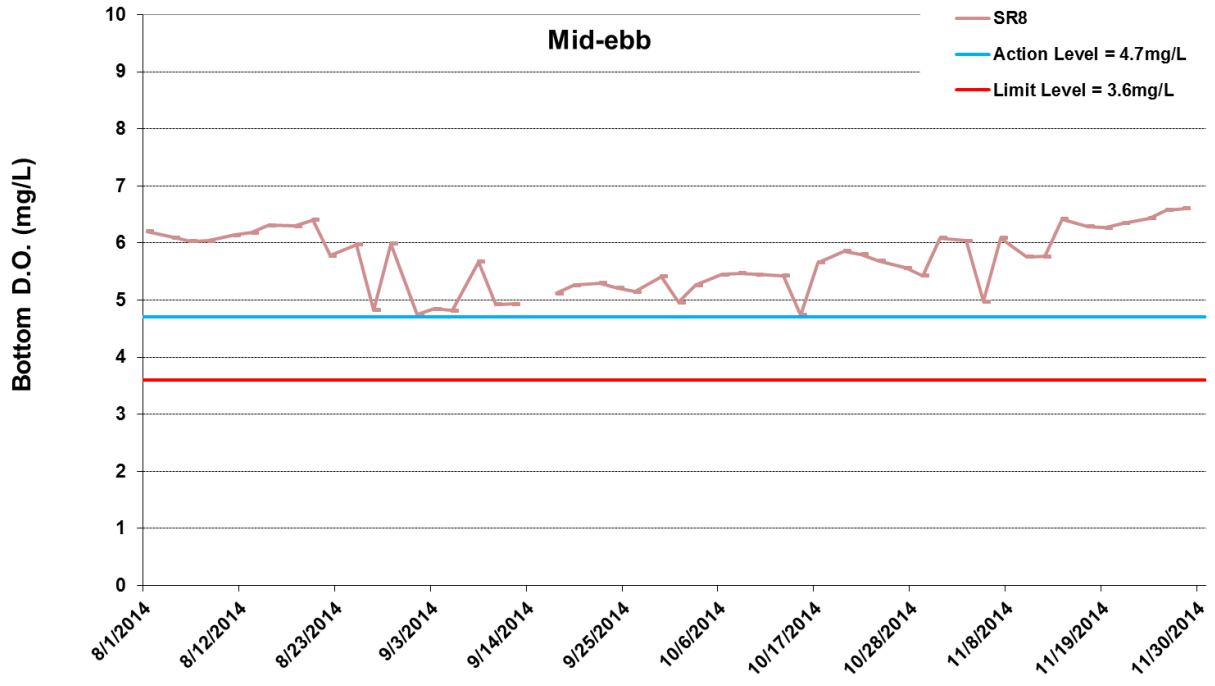


Figure I24 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



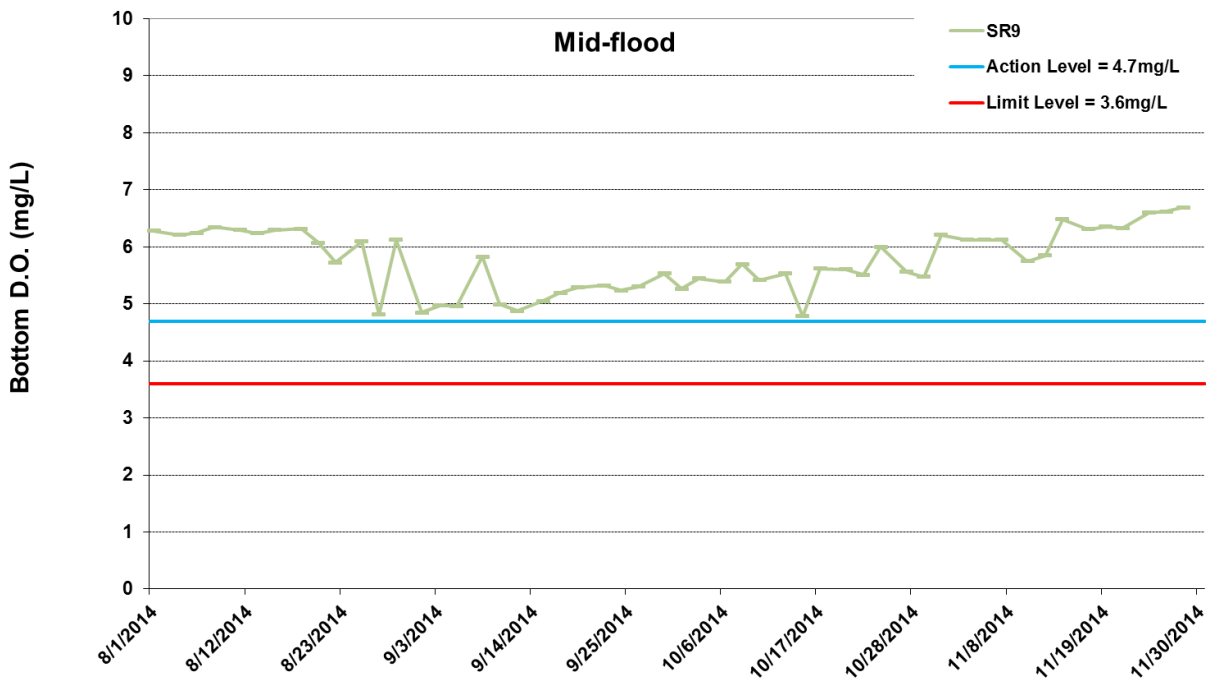
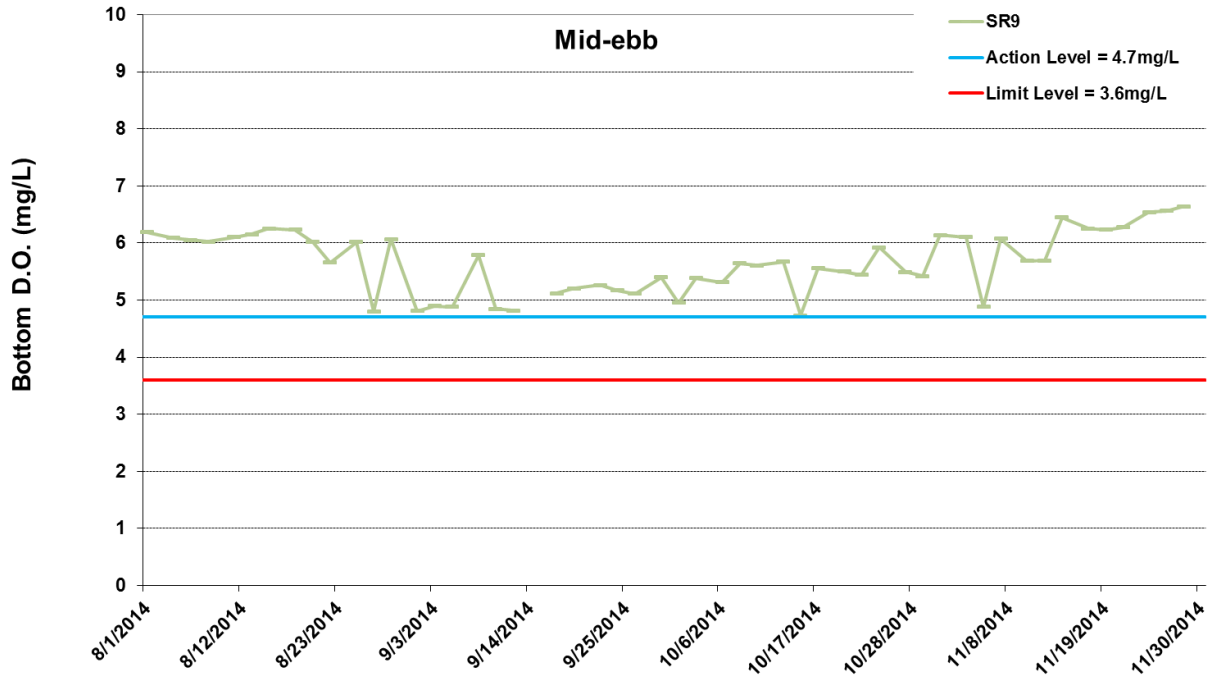


Figure I25 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 August 2014 and 30 November 2014 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.

Ref: 0212330_Impact-WQM_November2014_graphs_Rev a.xls



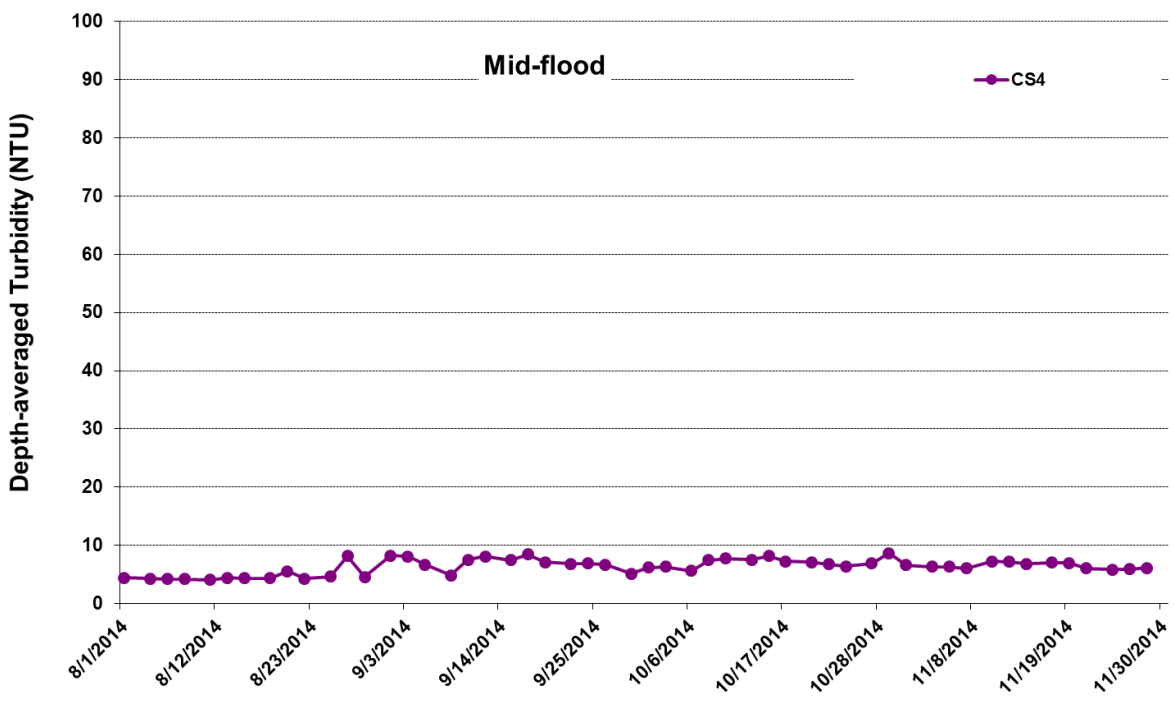
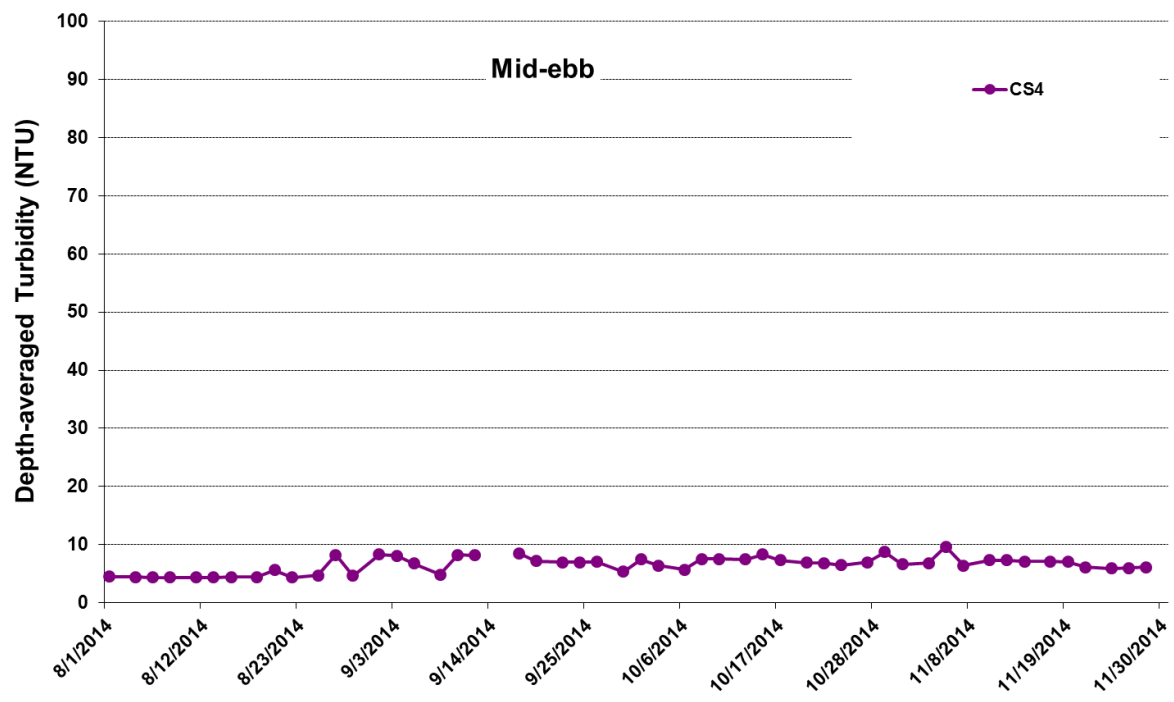


Figure I26 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



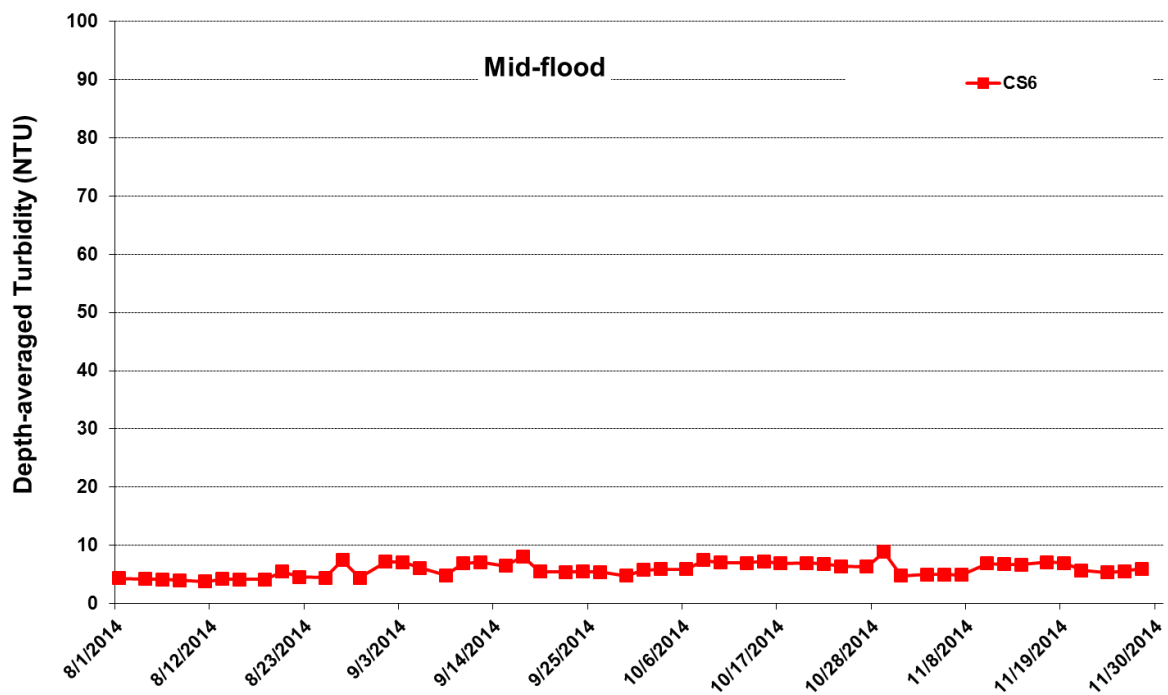
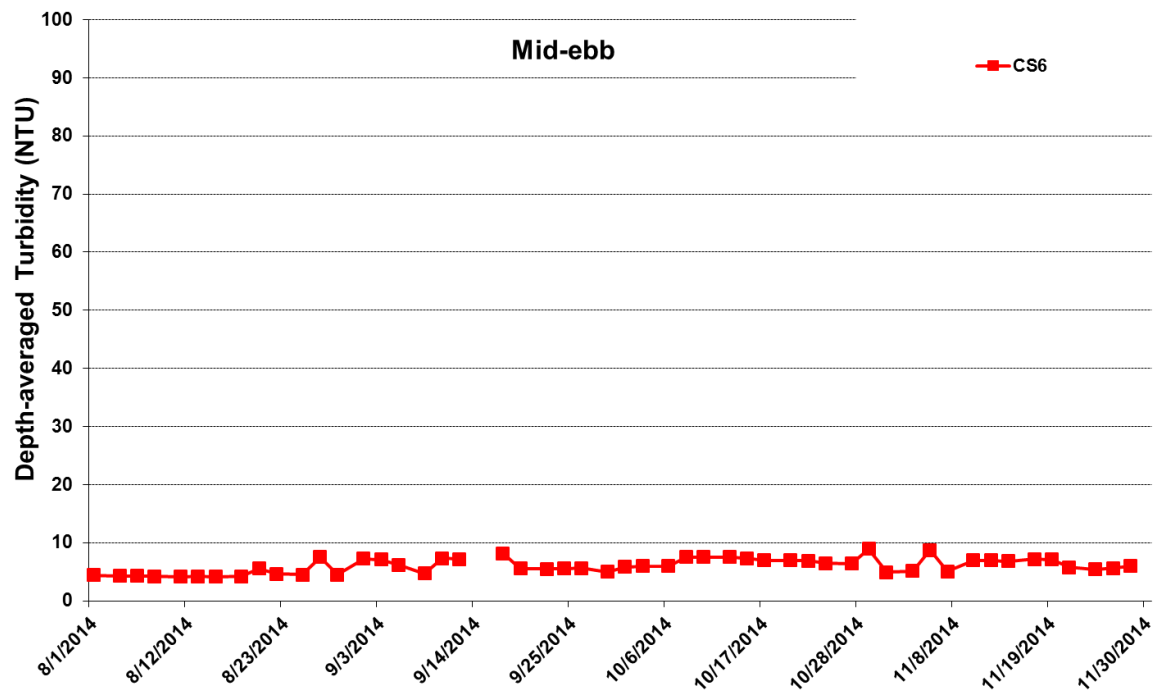


Figure I27 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



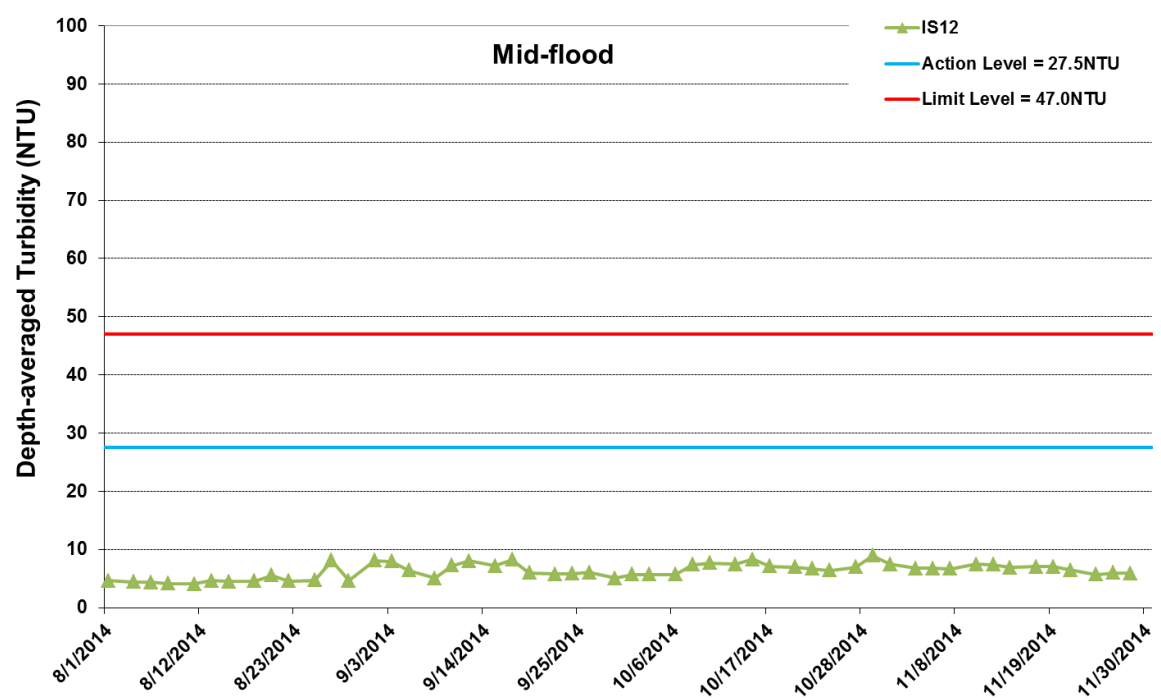
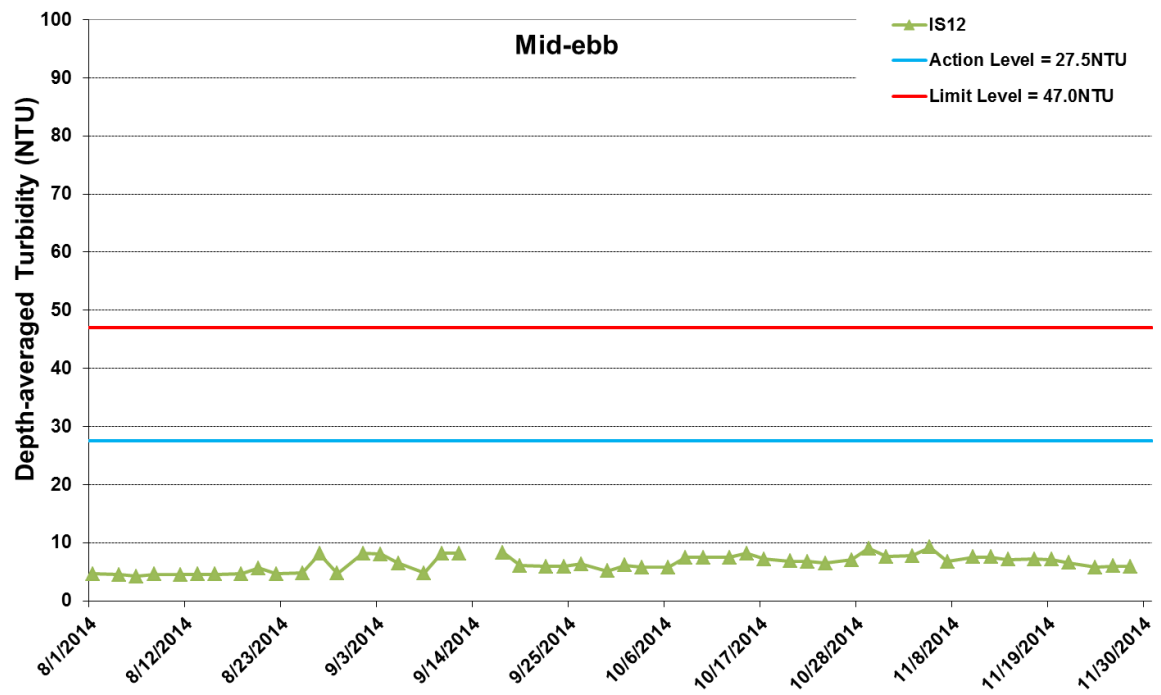


Figure I28 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



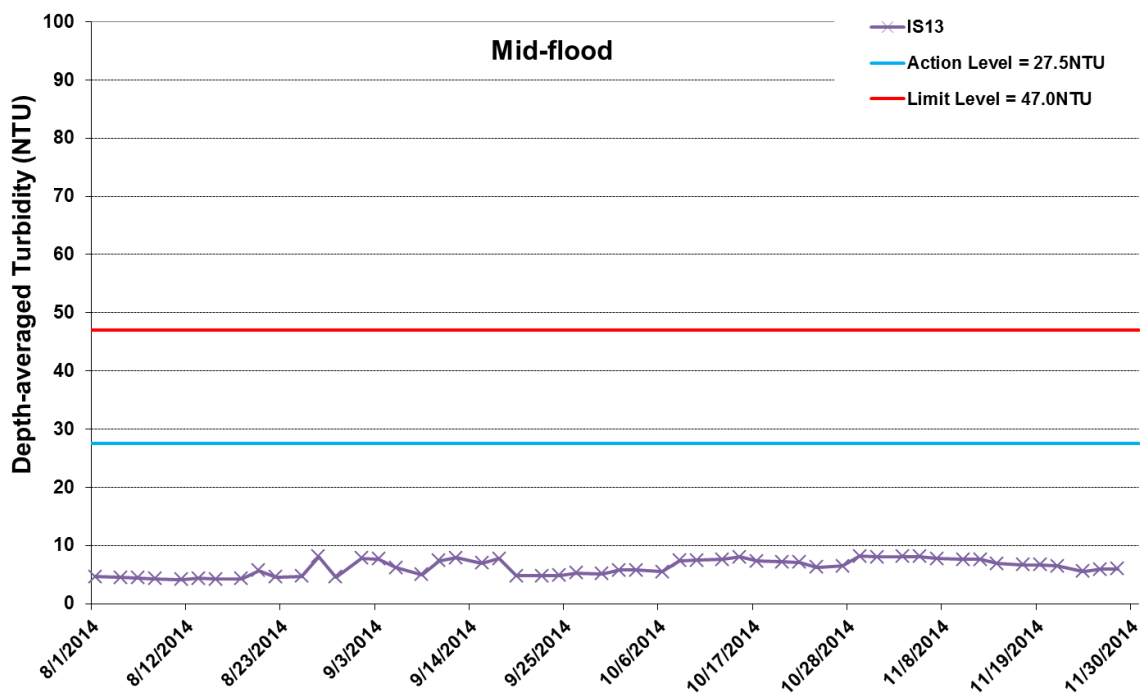
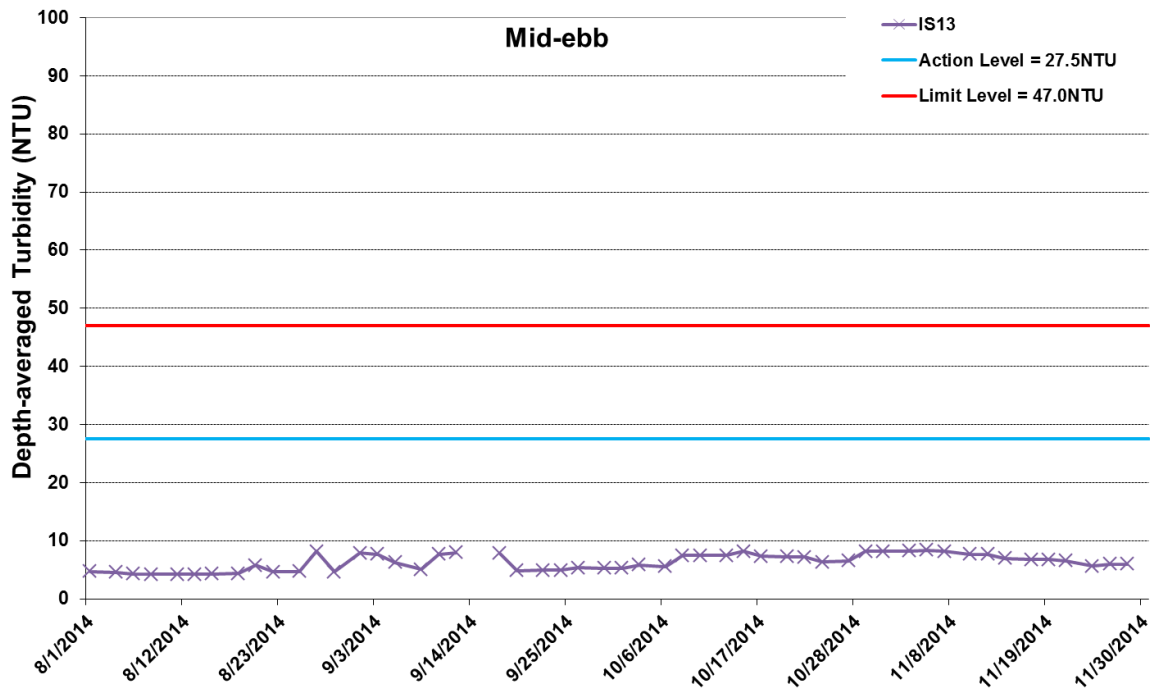


Figure I29 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



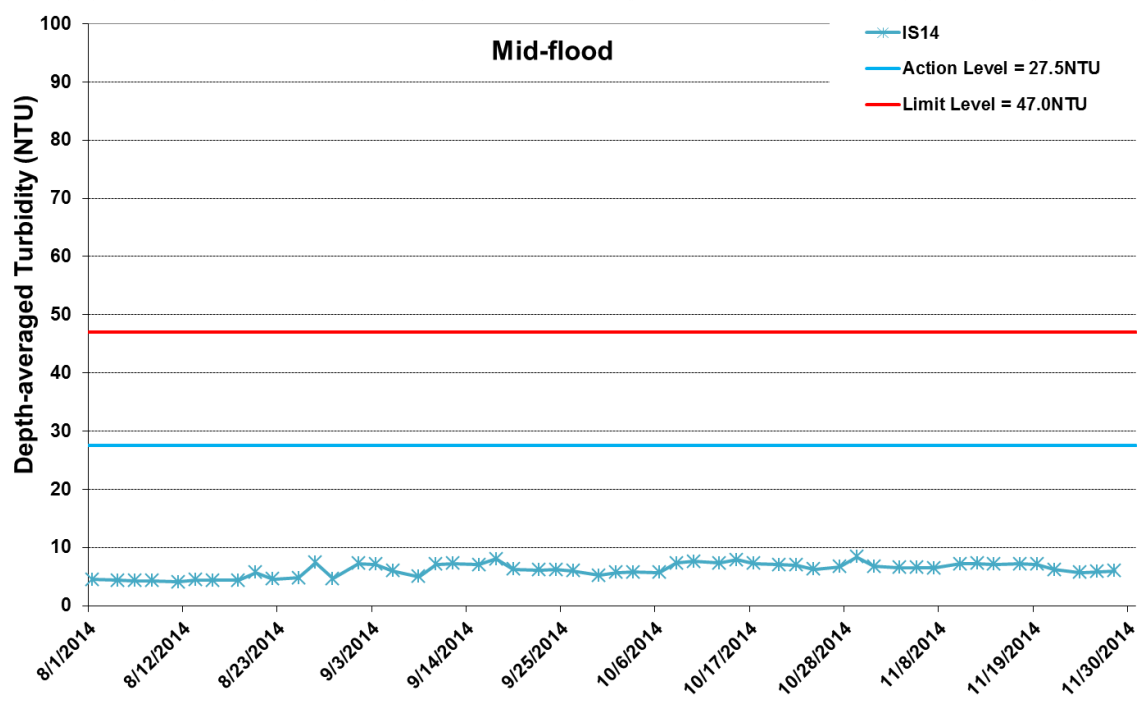
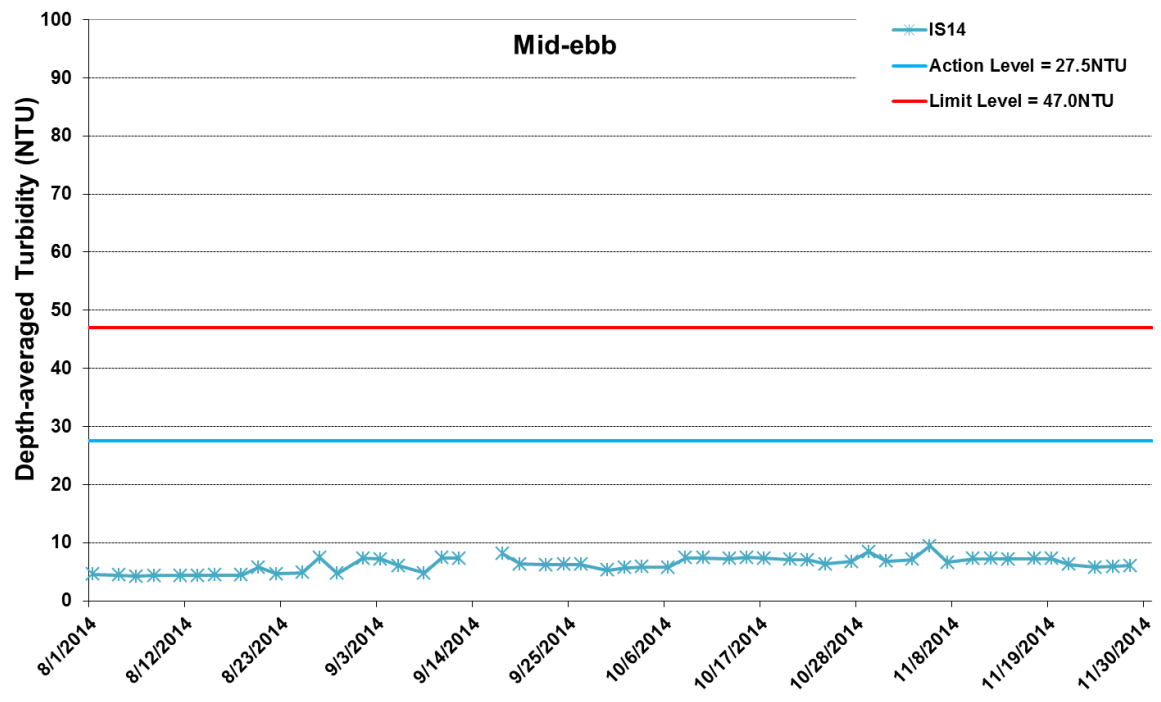


Figure I30 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



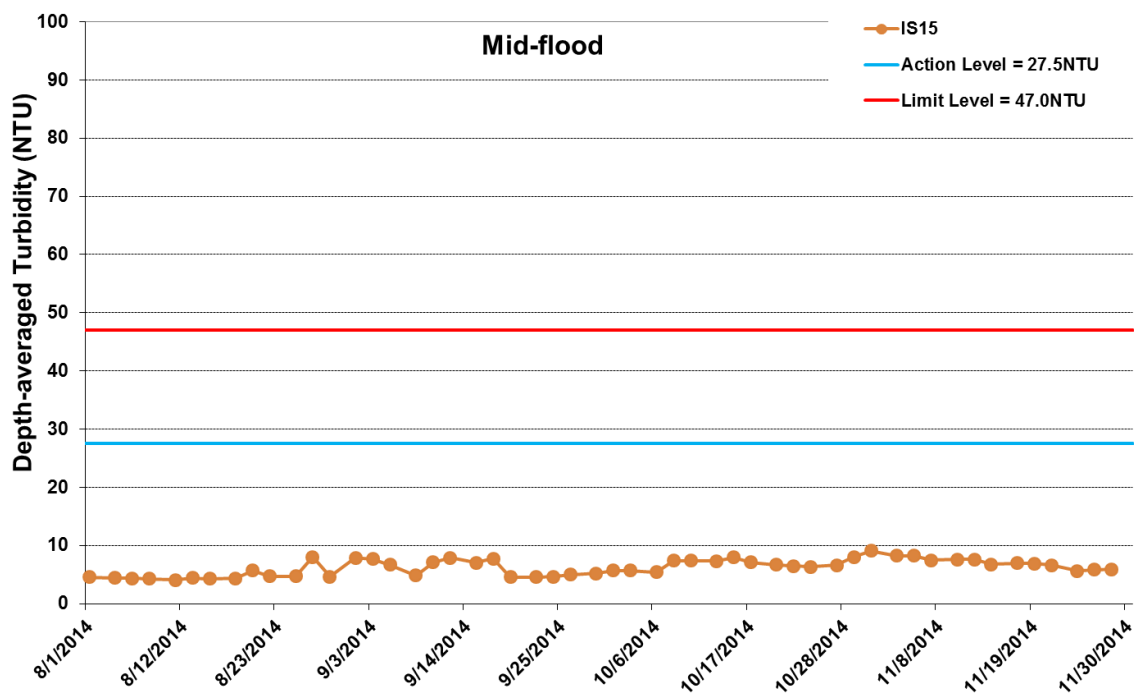
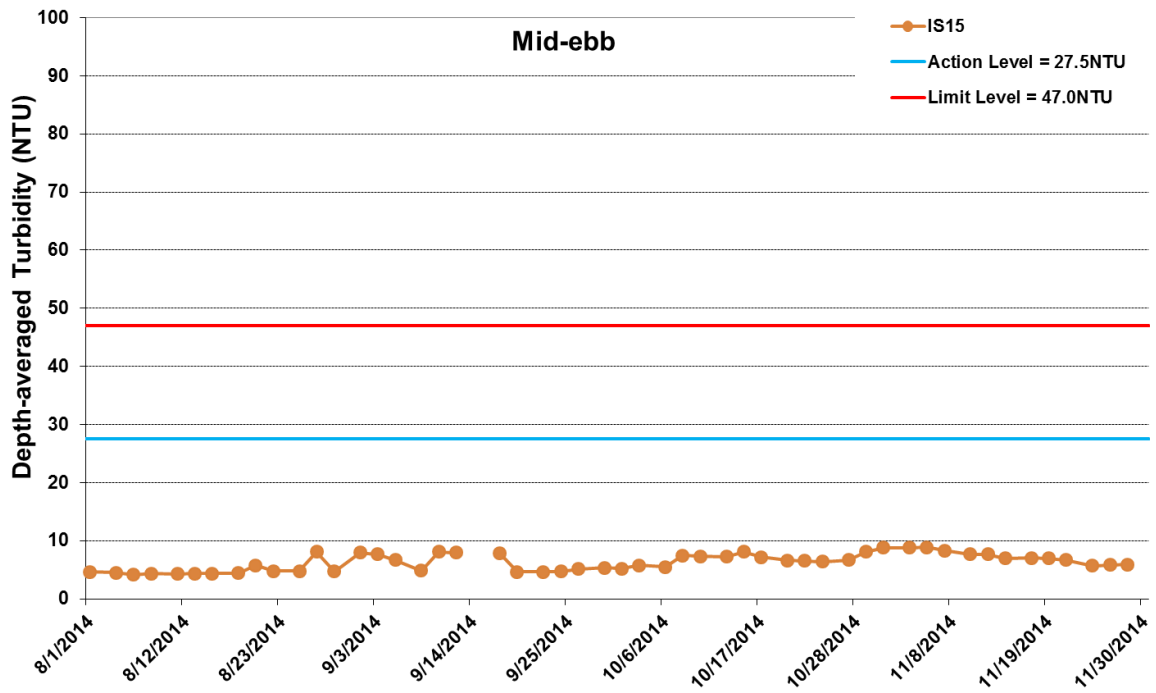


Figure I31 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



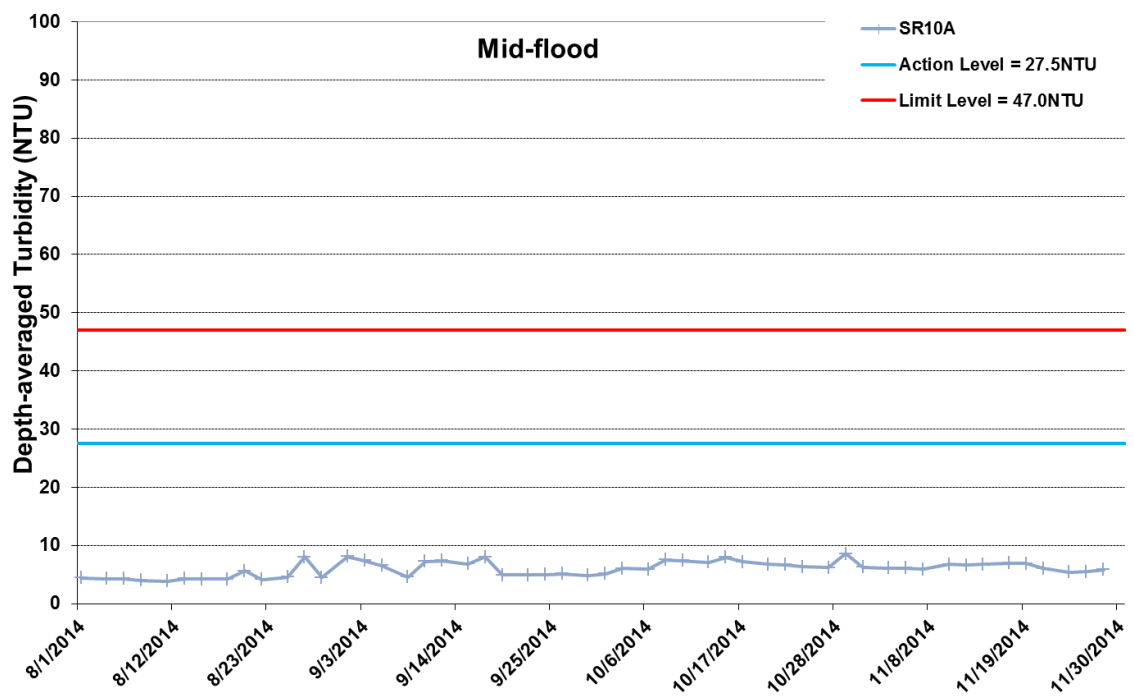
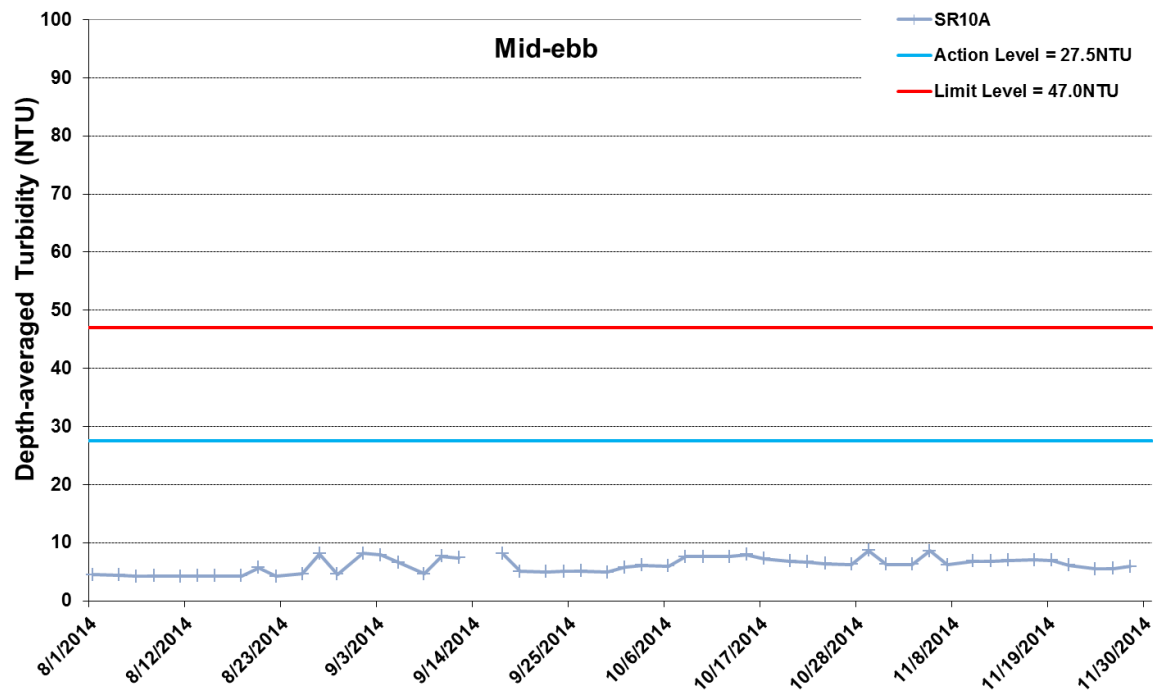


Figure I32 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



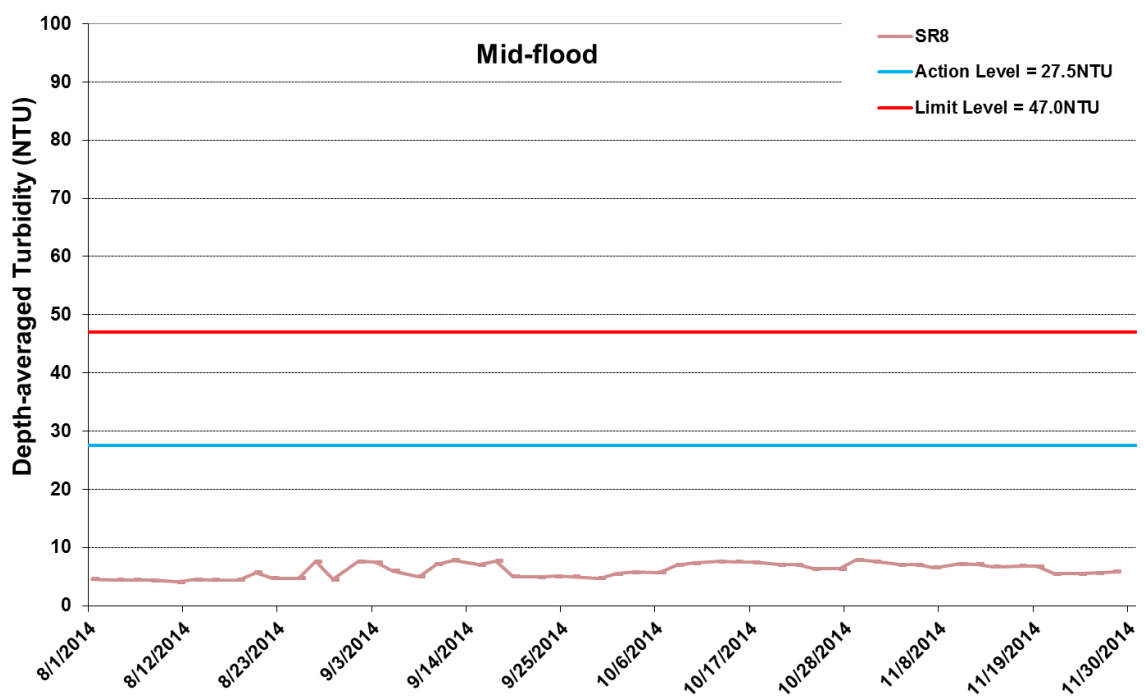
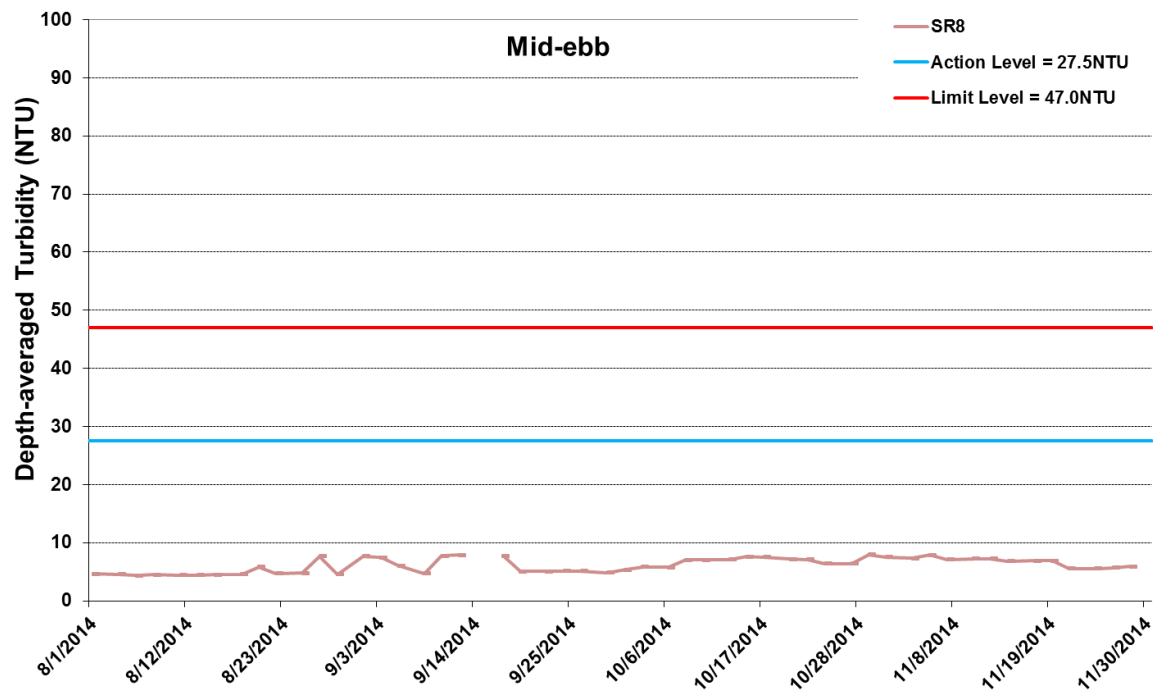


Figure I33 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



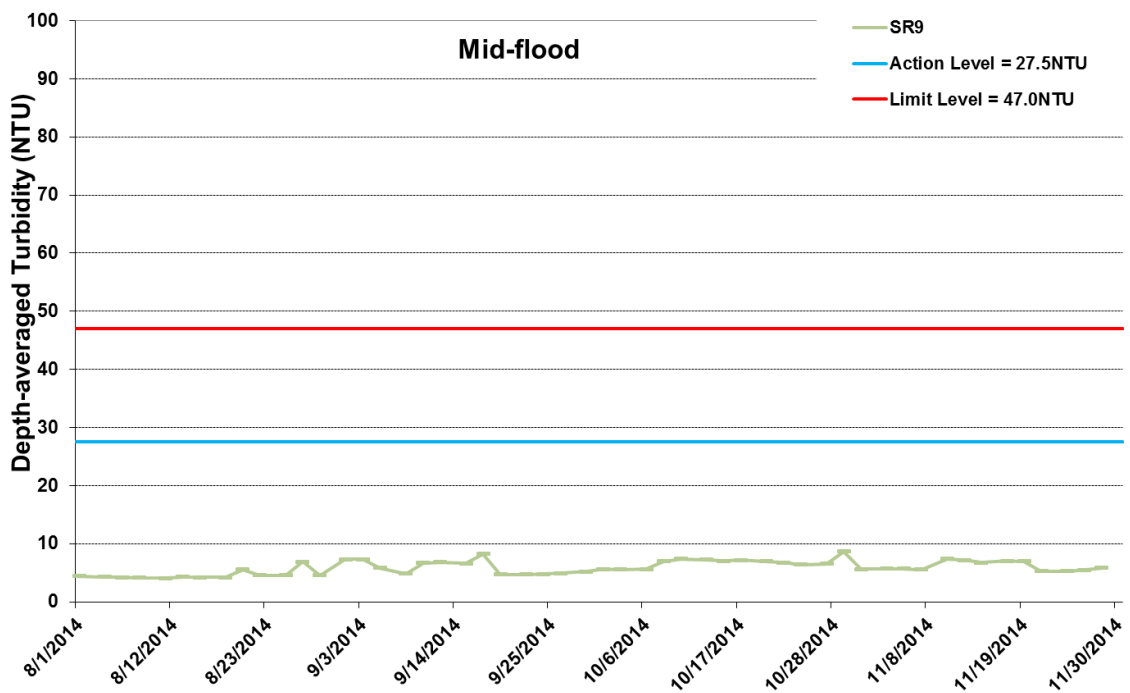
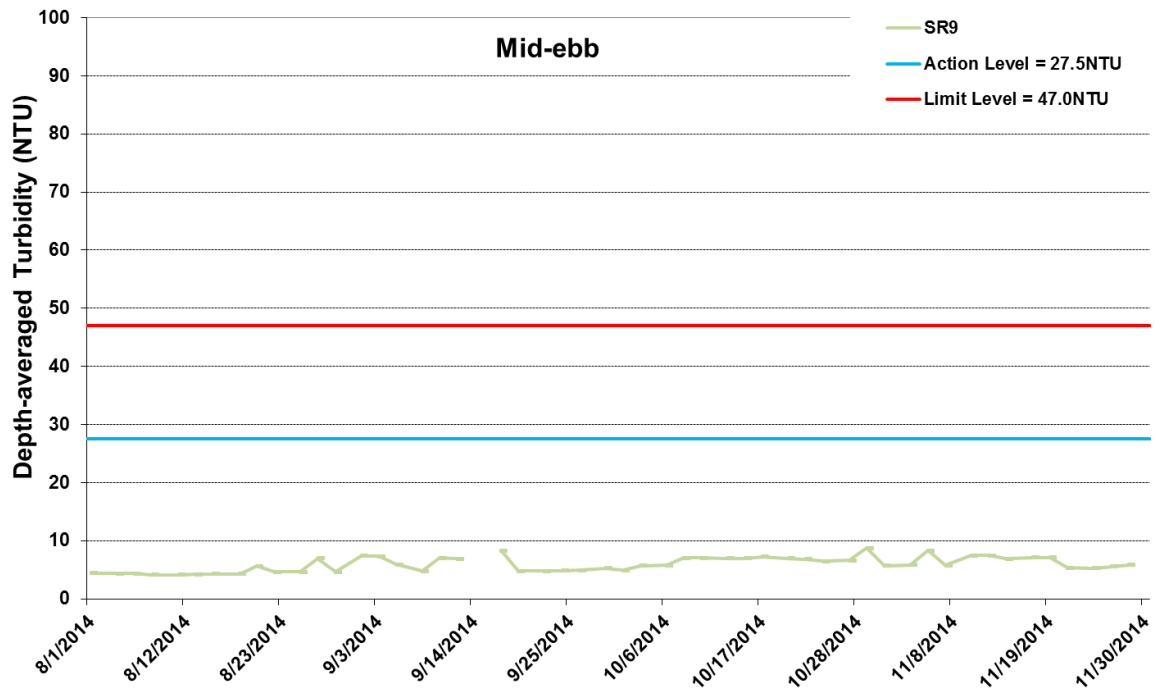


Figure I34 Impact Monitoring - Mean Depth-averaged Level of Turbidity (NTU) between 1 August 2014 and 30 November 2014 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



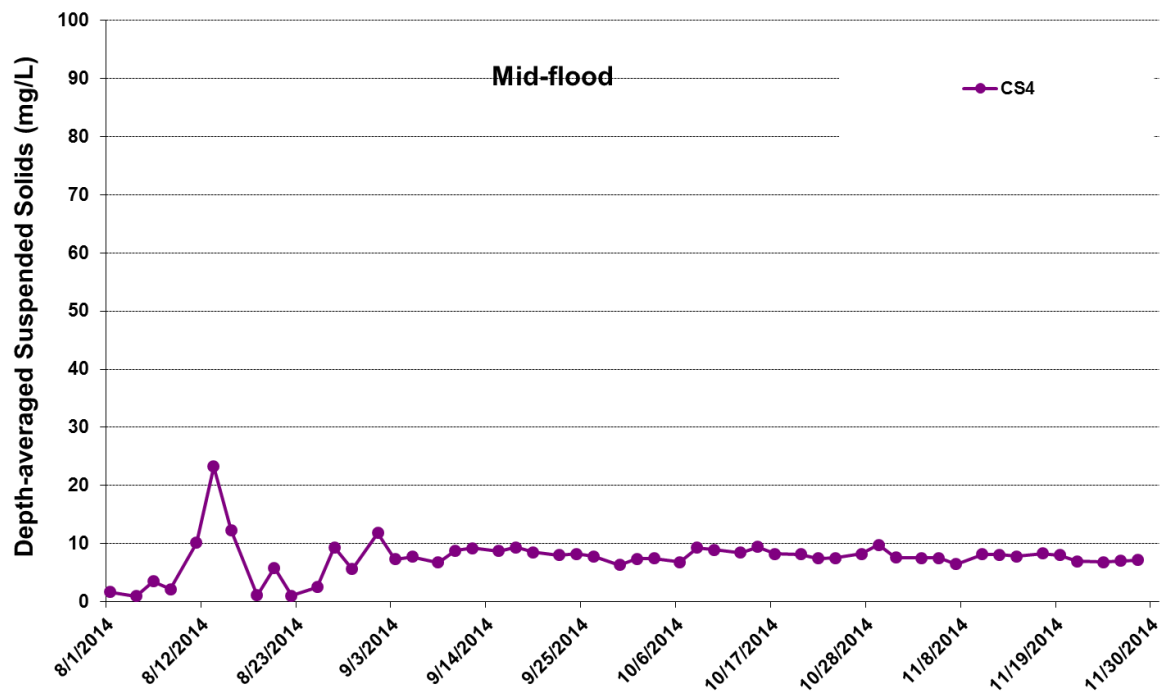
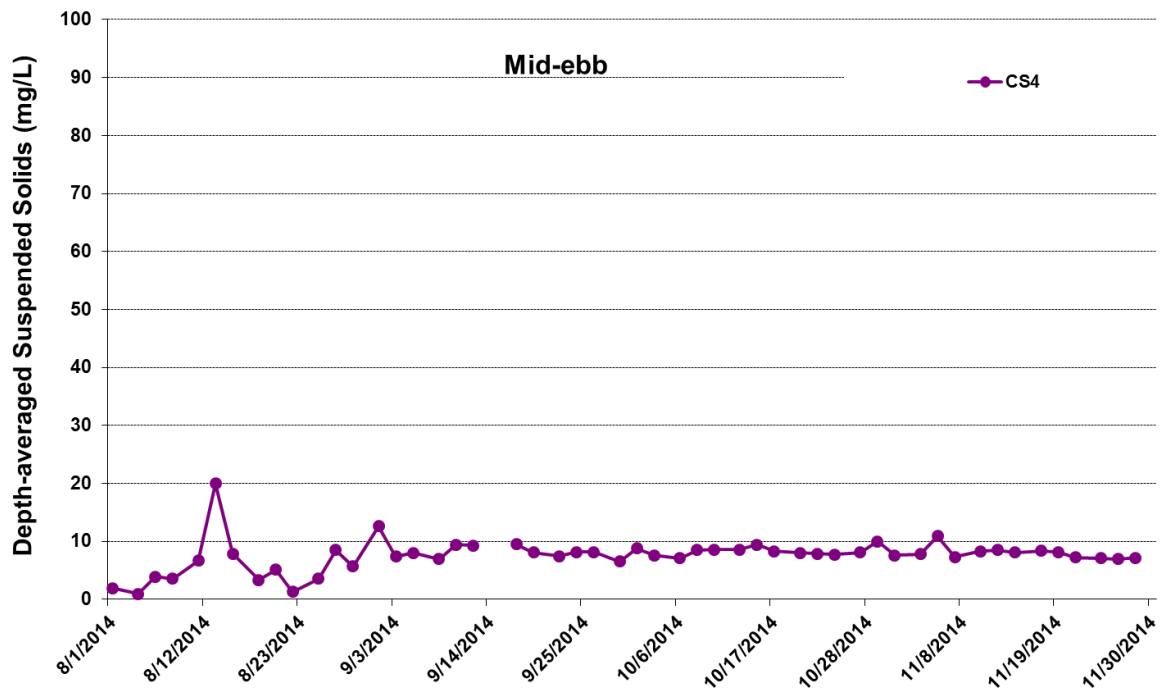


Figure I35 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at CS4. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



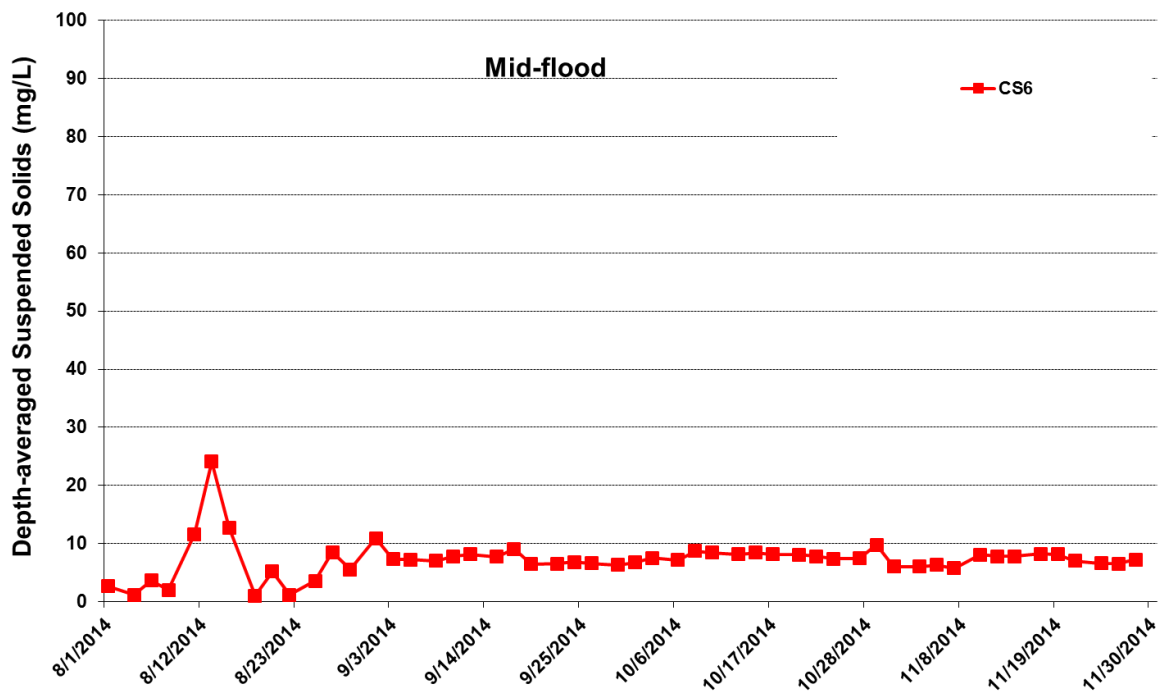
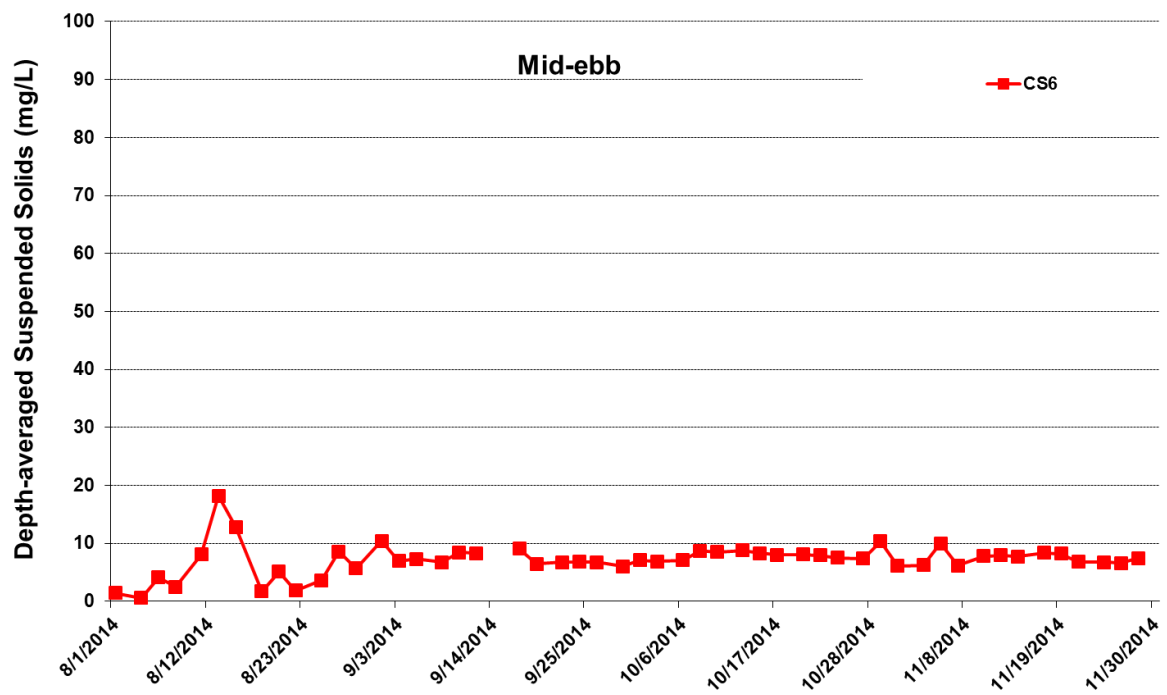


Figure I36 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at CS6. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



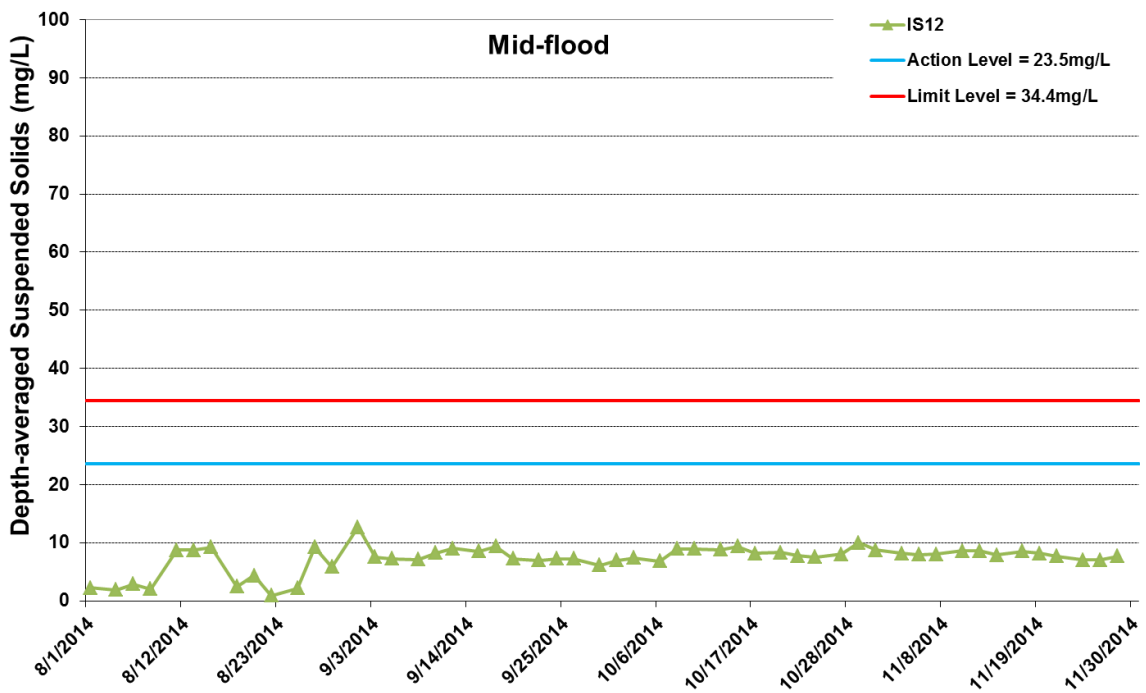
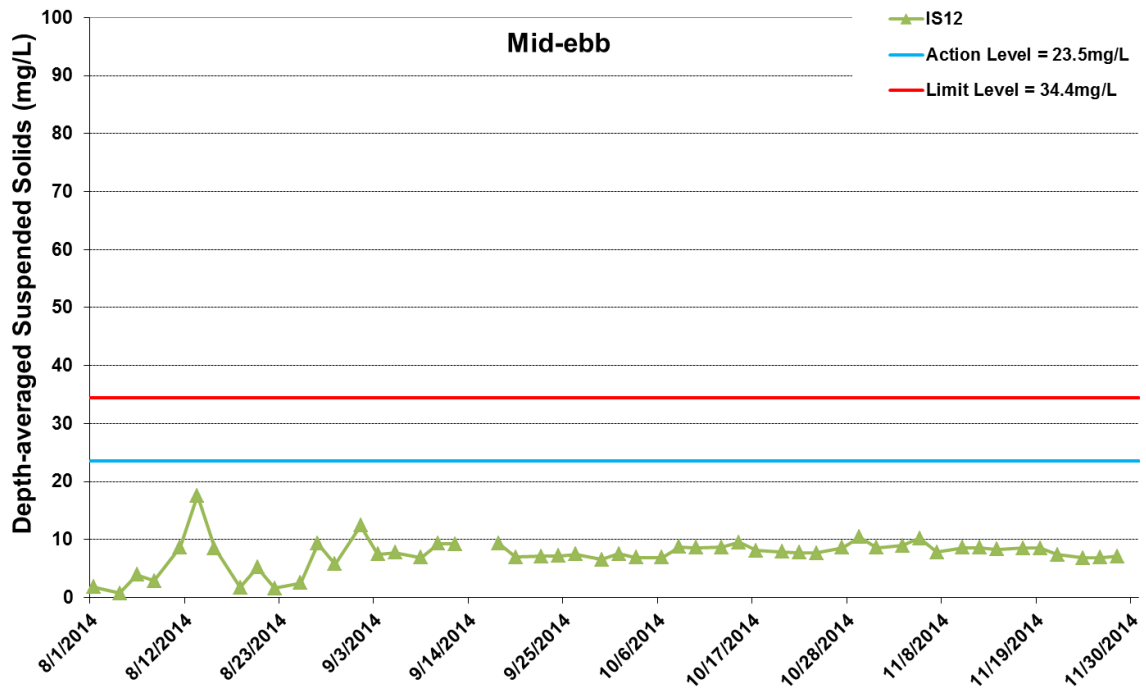


Figure I37 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at IS12. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



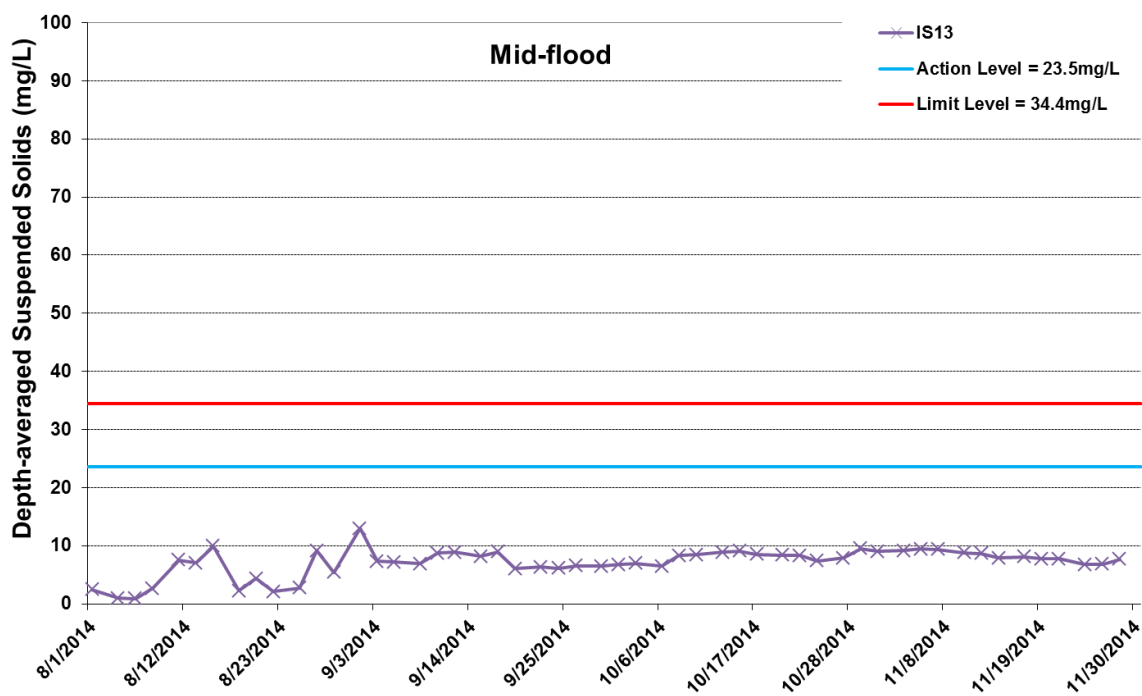
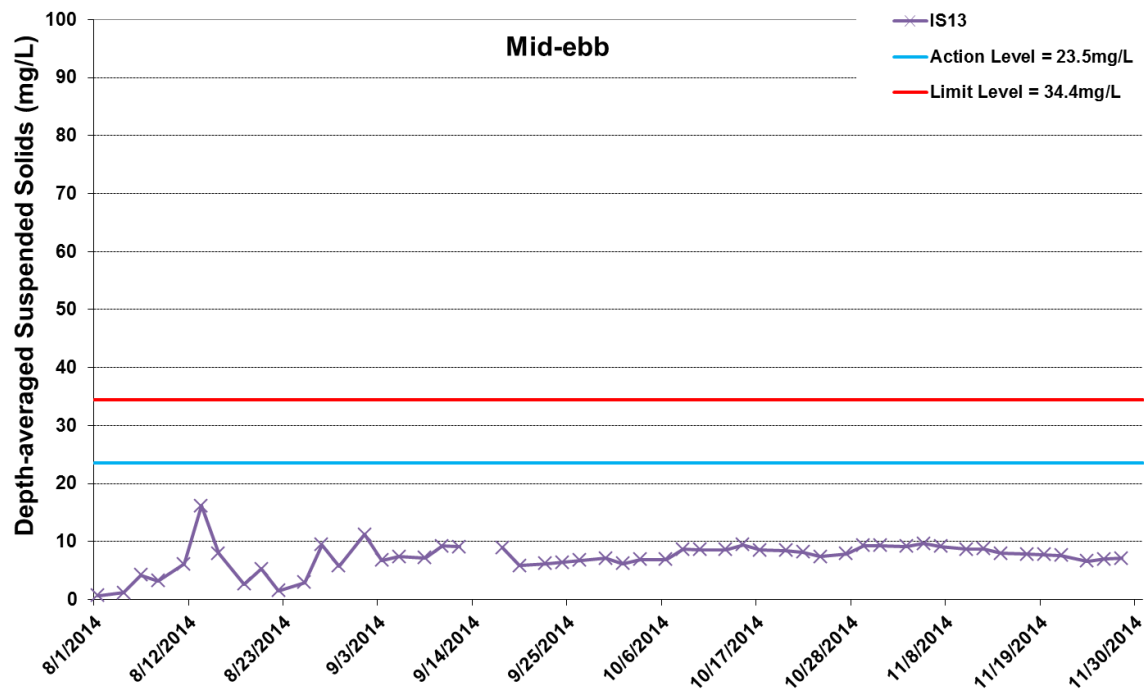


Figure I38 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at IS13. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



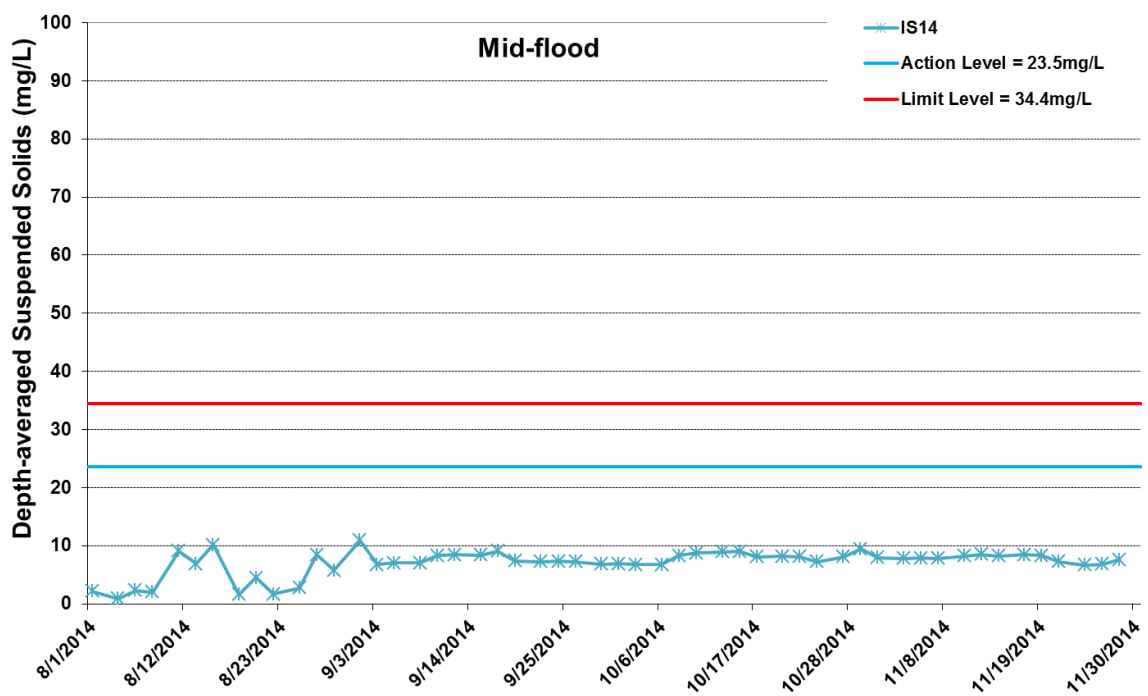
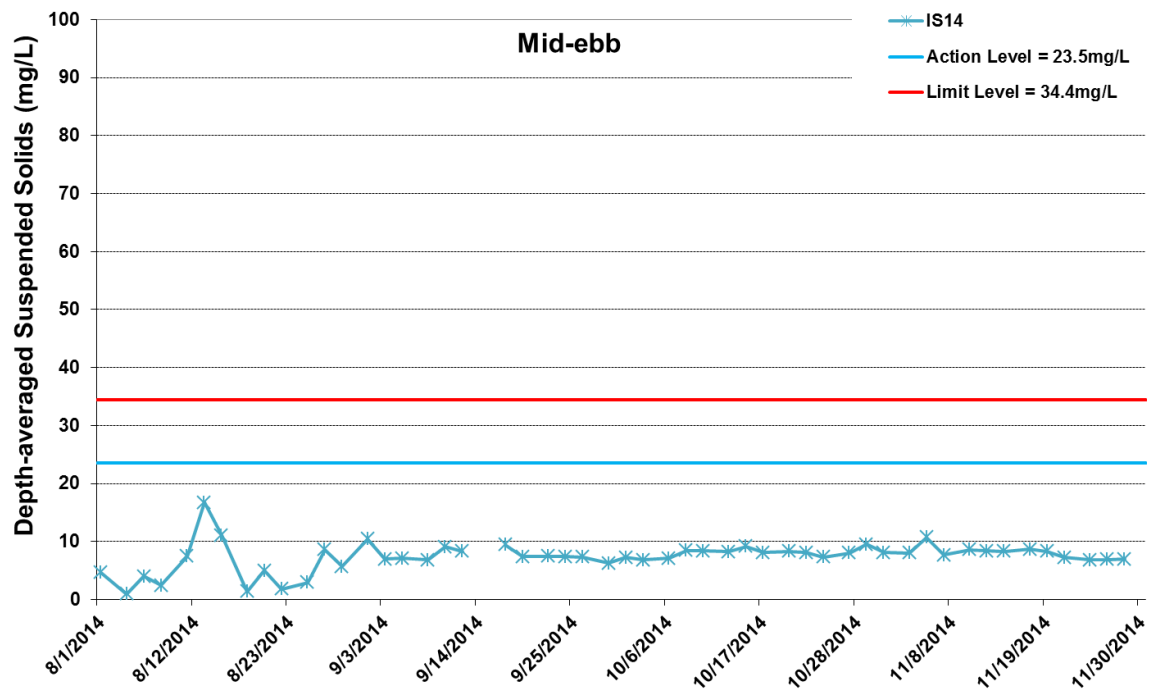


Figure I39 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at IS14. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



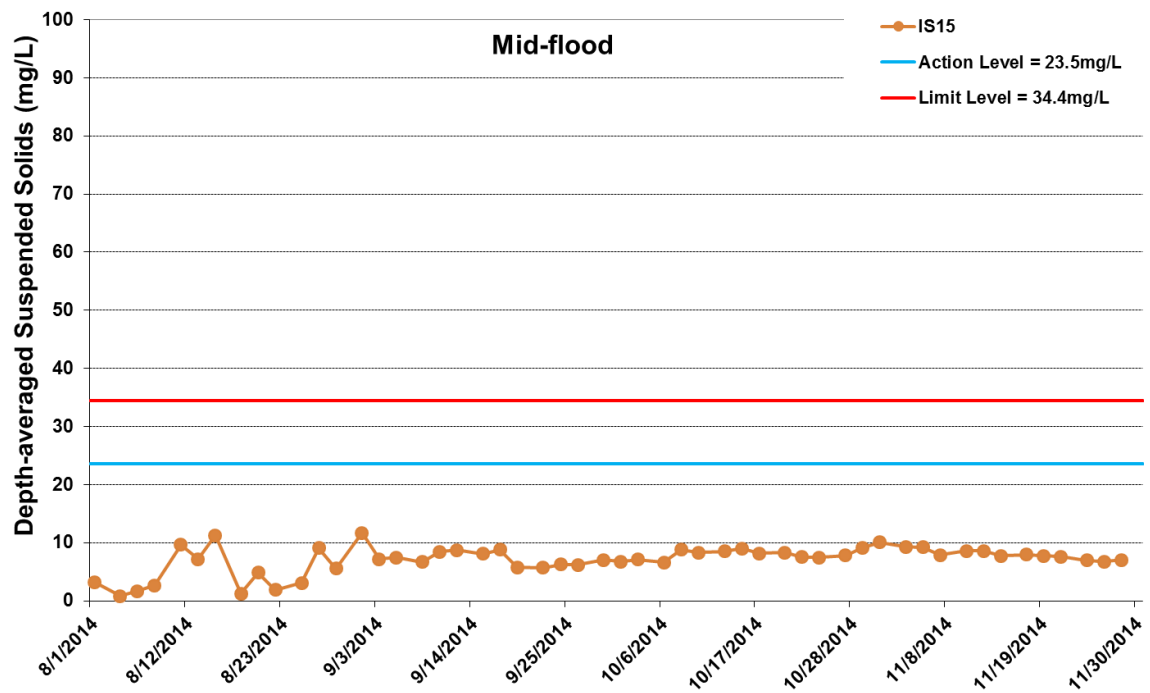
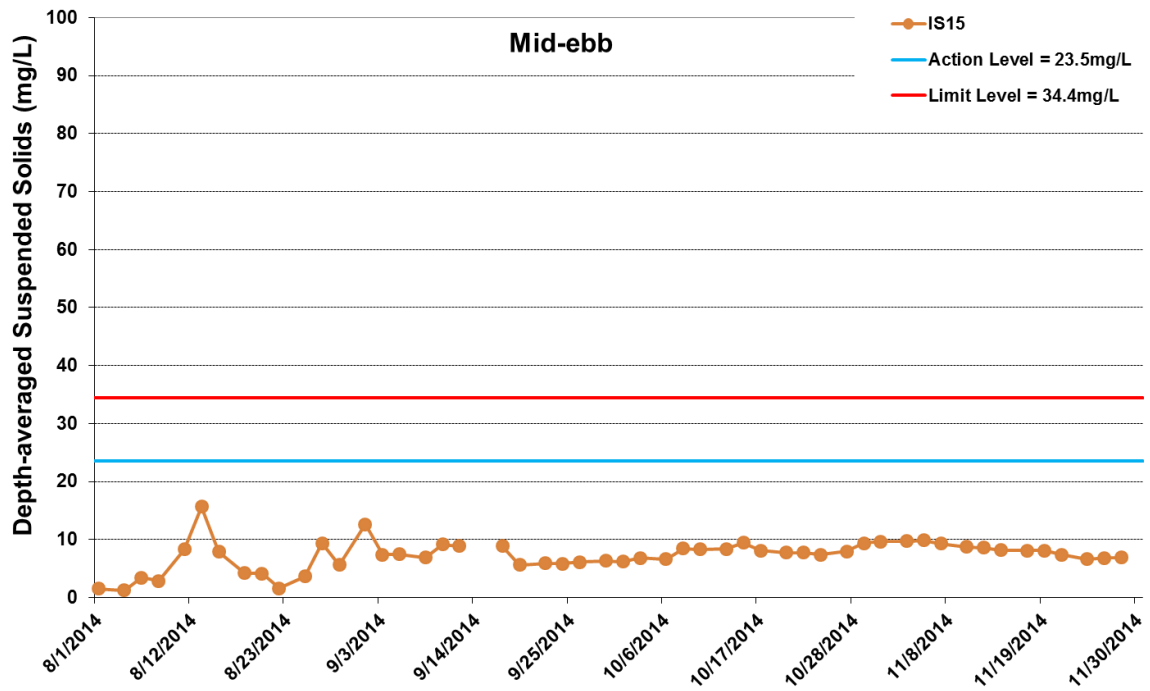


Figure I40 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at IS15. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



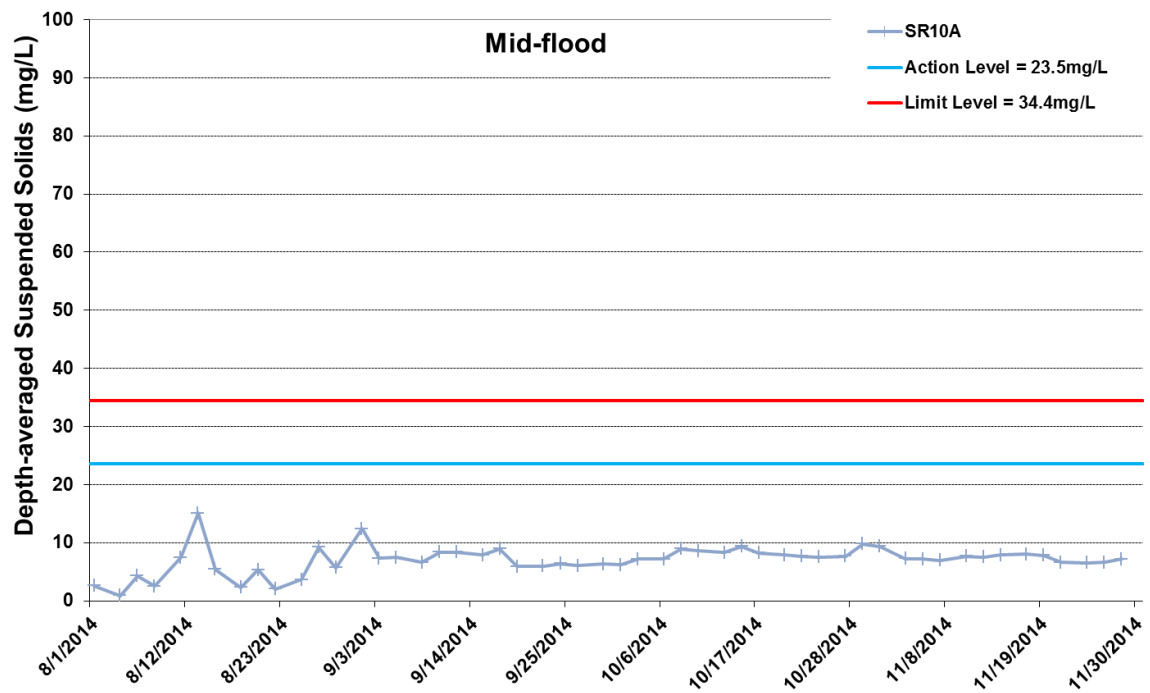
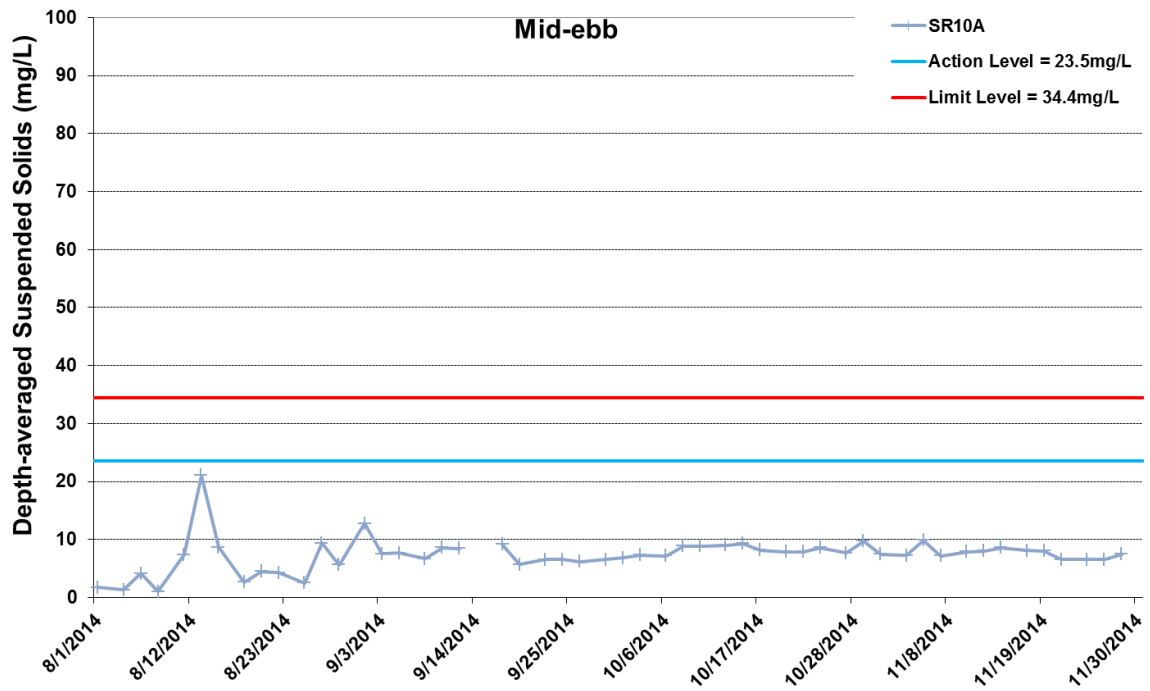


Figure I41 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at SR10A. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



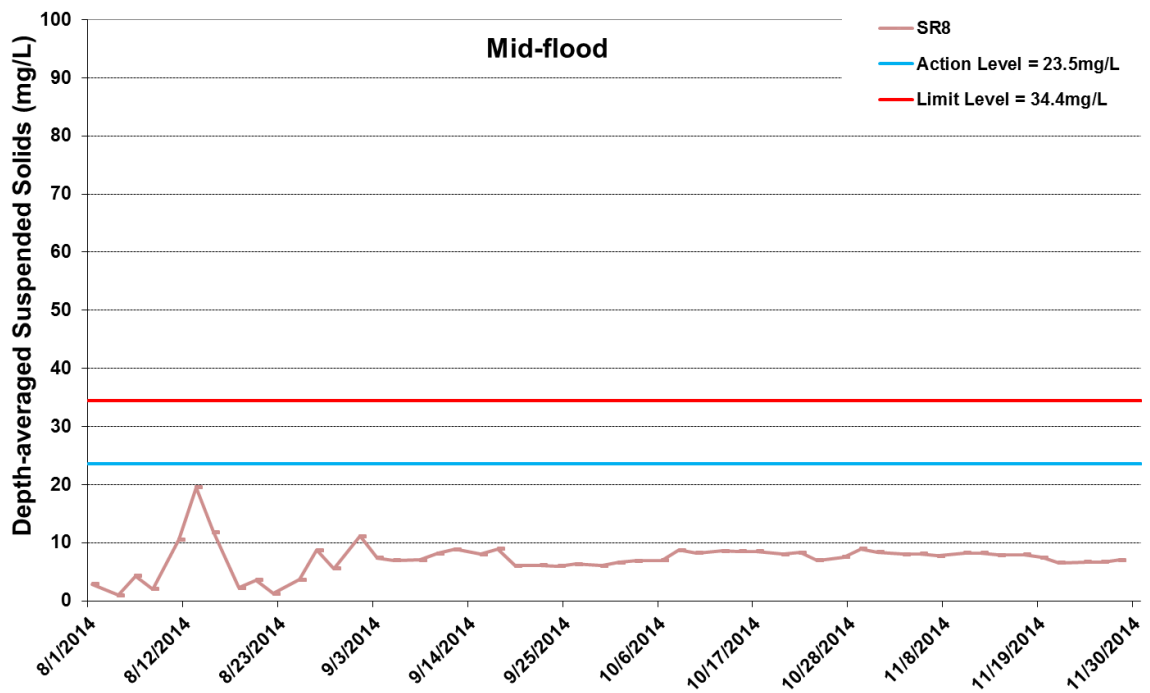
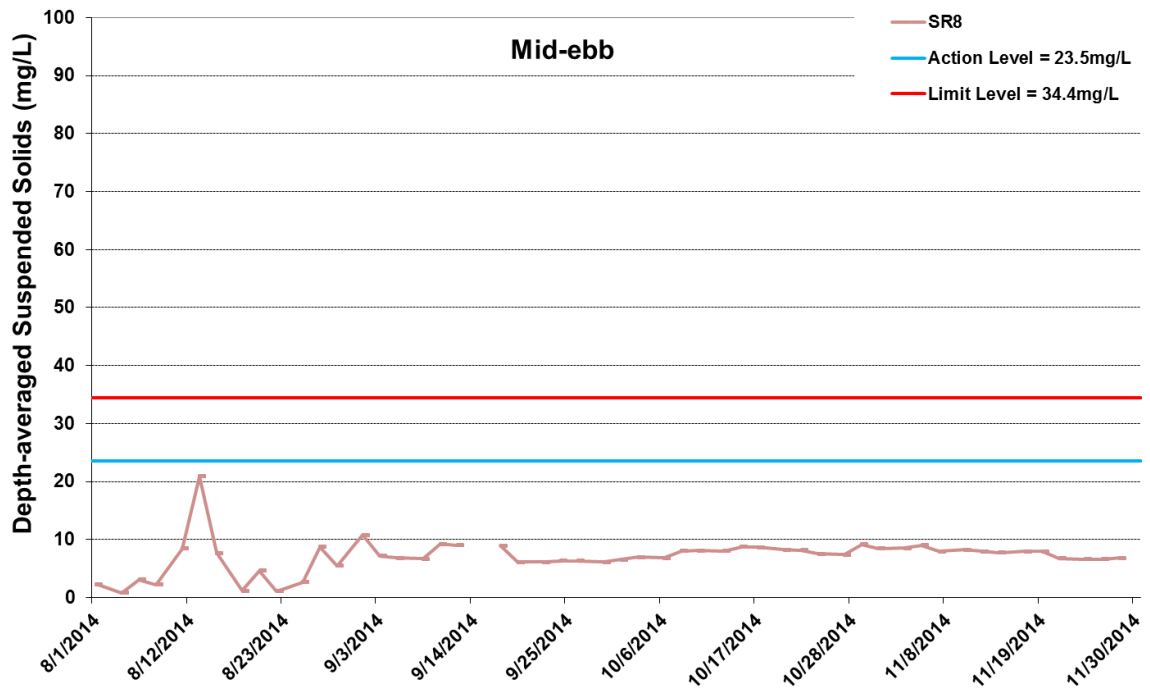


Figure I42 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at SR8. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



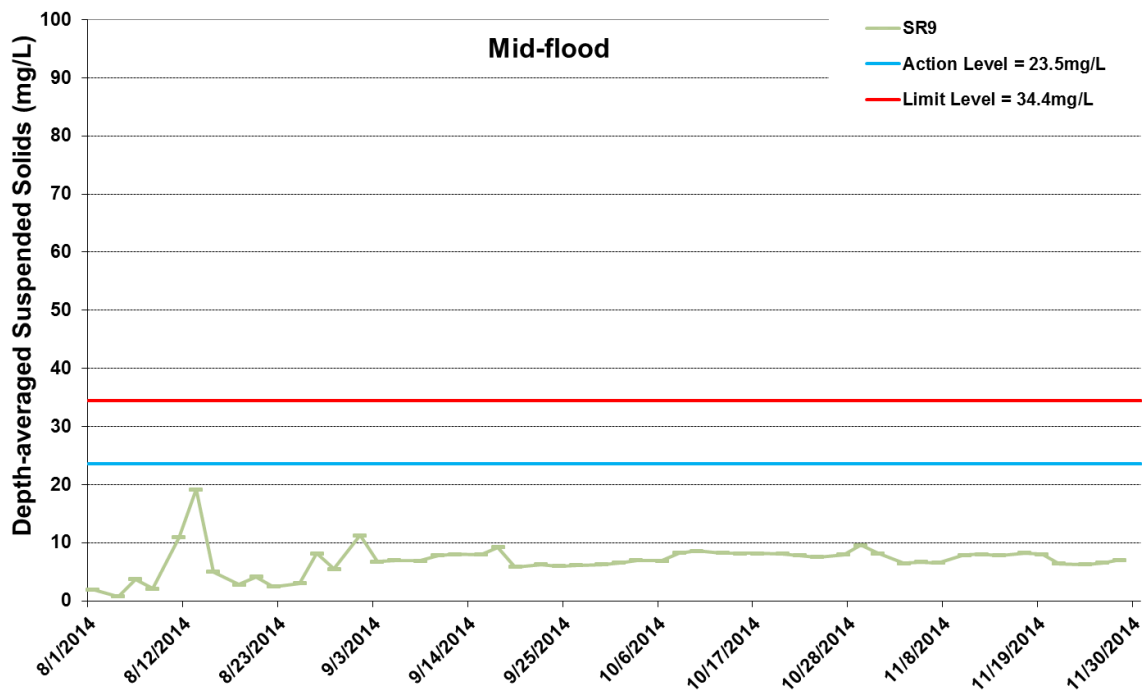
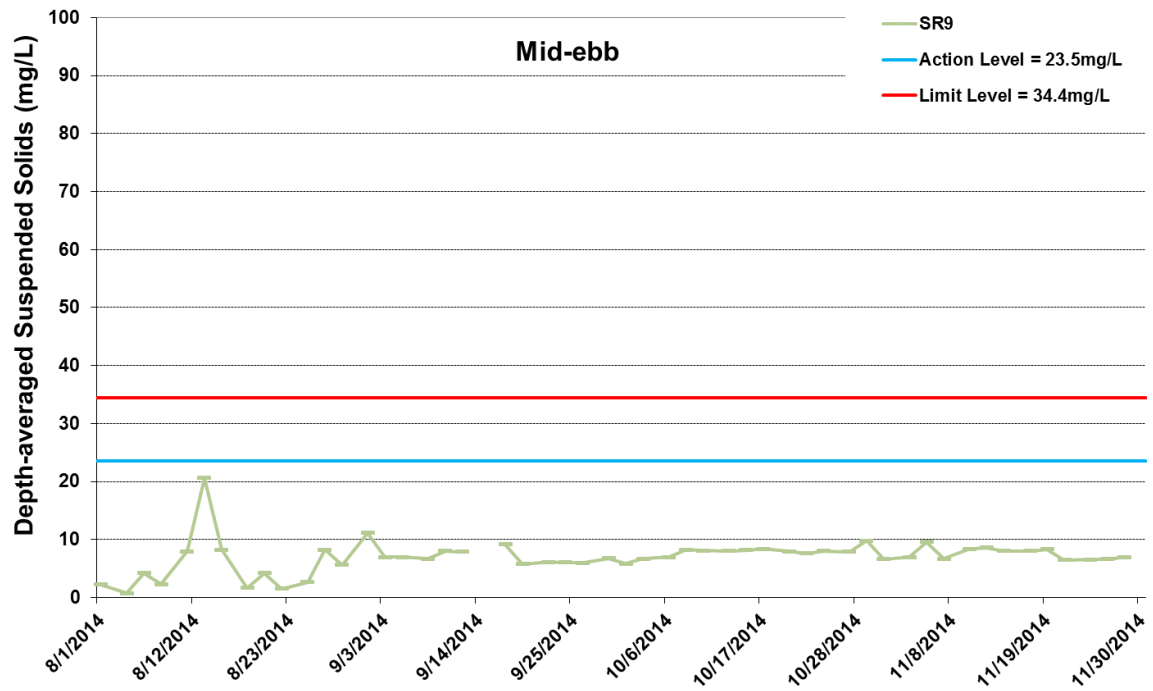


Figure I43 Impact Monitoring - Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 August 2014 and 30 November 2014 at SR9. The weather conditions during the monitoring period varied mostly from sunny to cloudy. Major marine construction activities included: Dredging (8/1/2014 - 8/6/2014); Construction of Temporary Seawalls (8/1/2014 - 11/20/2014); Sheet Piling (8/1/2014 - 11/20/2014); Filling (8/1/2014 - 11/20/2014). Please note WQM Mid-Ebb on 15-Sep was cancelled due to adverse weather.



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	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	17:25	26.6	7.58	27	6.35	5.72	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	17:25	26.7	7.6	27.1	6.38	5.7	7
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS4	Middle	9.8	2	1	17:25	26.8	7.64	27.2	6.24	6.94	7.9
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS4	Middle	9.8	2	2	17:25	26.9	7.66	27.3	6.22	6.92	8.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	18.5	3	1	17:25	27	7.71	27.4	6.51	6.21	7.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	18.5	3	2	17:25	27.1	7.73	27.5	6.53	6.19	7.7
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	14:43	26.5	7.74	27	6.92	4.76	5.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	14:43	26.6	7.72	27.1	6.94	4.74	5.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	1	14:43	26.7	7.68	27.2	6.35	4.93	6.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	2	14:43	26.8	7.7	27.2	6.33	4.95	6.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.9	3	1	14:43	27	7.72	27.3	6.52	5.13	6.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.9	3	2	14:43	27.1	7.74	27.4	6.5	5.15	6.1
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	16:40	26.6	7.71	27	7.31	6.43	7.7
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	16:40	26.5	7.73	26.9	7.34	6.41	7.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.3	2	1	16:40	26.7	7.65	27.1	7.11	6.68	7.9
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.3	2	2	16:40	26.7	7.67	27.2	7.09	6.7	8.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.5	3	1	16:40	26.9	7.84	27.4	6.99	7.03	8.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.5	3	2	16:40	27	7.86	27.4	6.97	7.05	8.7
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	16:20	26.5	7.64	27.1	6.99	8.13	9.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	16:20	26.5	7.66	27.2	7.01	8.11	9.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.6	2	1	16:20	26.6	7.73	27.3	7.13	7.82	8.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.6	2	2	16:20	26.7	7.71	27.4	7.15	7.8	8.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.1	3	1	16:20	26.8	7.8	27.5	7.03	8.25	9.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.1	3	2	16:20	26.9	7.82	27.6	7.05	8.27	9.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	17:00	26.4	7.63	27.1	6.26	5.41	6.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	17:00	26.5	7.65	27.2	6.24	5.39	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.1	2	1	17:00	26.6	7.73	27.3	6.14	7.06	8.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.1	2	2	17:00	26.7	7.75	27.4	6.16	7.08	8.7
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	11.2	3	1	17:00	26.8	7.83	27.5	6.47	7.15	8.3
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	11.2	3	2	17:00	26.9	7.81	27.6	6.5	7.17	8.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	16:00	26.4	7.73	27	7.11	8.13	9
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	16:00	26.5	7.75	27.1	7.13	8.1	9.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.5	2	1	16:00	26.6	7.61	27.2	7.25	7.95	8.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.5	2	2	16:00	26.7	7.63	27.3	7.27	7.97	9.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	9.9	3	1	16:00	26.8	7.85	27.4	7.2	8.65	9.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	9.9	3	2	16:00	26.9	7.87	27.5	7.18	8.67	9.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	15:28	26.8	7.63	27	6.38	6.15	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	15:28	26.9	7.61	27.1	6.4	6.17	7.1
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	15:28						
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	15:28						
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.5	3	1	15:28	27.1	7.68	27.3	6.17	7.94	9
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.5	3	2	15:28	27.1	7.7	27.3	6.15	7.92	9.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	15:43	26.6	7.63	27.1	6.48	5.92	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	15:43	26.7	7.65	27.2	6.5	5.94	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	15:43						
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	15:43						
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.5	3	1	15:43	26.8	7.72	27.3	6.13	5.44	6.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.5	3	2	15:43	26.9	7.7	27.3	6.11	5.42	6.1
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	15:08	26.6	7.77	27	6.14	4.73	5.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	15:08	26.7	7.79	27.1	6.16	4.71	5.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.9	2	1	15:08	26.8	7.83	27.1	6.03	6.58	7.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.9	2	2	15:08	26.9	7.85	27.2	6.01	6.6	7.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.8	3	1	15:08	27	7.63	27.4	5.99	6.99	8.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.8	3	2	15:08	26.9	7.65	27.4	6	6.97	8.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	08:05	26.8	8.14	24.9	7.32	5.94	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	08:05	26.9	8.15	25	7.28	6.02	7.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	9.6	2	1	08:05	26.9	8.1	27	6.63	7.72	8.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	9.6	2	2	08:05	26.9	8.11	27.1	6.66	7.81	8.6

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	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	18.2	3	1	08:05	26.8	8.12	27.1	6.81	6.54	7.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	18.2	3	2	08:05	26.9	8.13	27.2	6.83	6.62	7.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	10:15	26.7	8.04	27.2	6.72	4.86	5.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	10:15	26.7	8.05	27.1	6.77	4.75	5.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.8	2	1	10:15	26.8	8.07	27.5	6.28	5.06	6.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.8	2	2	10:15	26.9	8.08	27.6	6.24	5.12	6.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.6	3	1	10:15	27	8.09	27.7	6.41	5.43	6.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.6	3	2	10:15	27	8.1	27.8	6.43	5.52	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	08:42	26.7	8.11	27.4	7.26	6.73	7.9
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	08:42	26.8	8.1	27.5	7.29	6.67	8.1
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	1	08:42	26.8	8.12	27.8	7.08	8.15	9.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	2	08:42	26.8	8.13	27.9	7.04	8.24	9.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	1	08:42	26.8	8.14	28.1	6.98	8.38	9.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	2	08:42	26.9	8.15	28.1	6.95	8.33	9.1
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	09:01	26.9	8.1	27.7	6.87	8.27	9.1
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	09:01	26.9	8.11	27.8	6.9	8.21	8.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.4	2	1	09:01	26.9	8.11	28	6.97	7.94	8.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.4	2	2	09:01	27	8.12	28.1	7	8	9
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	9.8	3	1	09:01	27	8.14	28.2	6.85	8.48	9.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	9.8	3	2	09:01	27.1	8.15	28.2	6.82	8.55	9.7
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	08:24	26.7	8.11	27.1	6.08	5.66	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	08:24	26.7	8.12	27	6.12	5.71	6.7
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	6	2	1	08:24	26.7	8.08	27.6	6.04	8.68	9.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	6	2	2	08:24	26.8	8.09	27.7	6	8.74	9.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	11	3	1	08:24	26.8	8.12	27.9	6.22	6.81	7.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	11	3	2	08:24	26.8	8.13	27.9	6.25	6.88	8.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	09:19	26.8	8.15	28.1	6.95	8.37	9.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	09:19	26.9	8.14	28.1	6.98	8.42	9.5
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.3	2	1	09:19	26.9	8.16	28.2	7.13	8.08	9.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.3	2	2	09:19	26.9	8.16	28.2	7.11	8.15	9.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	9.6	3	1	09:19	27	8.14	28.2	7.18	9.75	10.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	9.6	3	2	09:19	27	8.15	28.3	7.21	9.81	10.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	09:54	26.8	8.09	27.7	6.19	6.34	7.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	09:54	26.7	8.1	27.8	6.15	6.27	7.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	09:54						
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	09:54						
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	1	09:54	26.8	8.13	27.9	6.06	8.24	9.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	2	09:54	26.9	8.14	28	6.02	8.31	9.7
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	09:37	26.8	8.1	28	6.31	6.07	7.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	09:37	26.8	8.11	28	6.28	6.14	7.3
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	09:37						
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	09:37						
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.2	3	1	09:37	26.9	8.12	28	6.09	5.55	6.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.2	3	2	09:37	27	8.13	28.1	6.11	5.61	6.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	10:42	26.6	8.14	28.1	5.97	4.87	5.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	10:42	26.7	8.15	28	6.01	4.94	5.4
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.7	2	1	10:42	26.6	8.1	28.3	5.88	6.72	7.8
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.7	2	2	10:42	26.7	8.11	28.4	5.85	6.78	7.6
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	14.4	3	1	10:42	26.8	8.12	28.6	5.92	7.06	8.2
TMCLKL	HY/2012/08	2014-11-03	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	14.4	3	2	10:42	26.8	8.13	28.6	5.9	7.11	8.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	18:37	26.7	7.61	27.1	6.39	5.71	6.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	18:37	26.7	7.59	27.1	6.35	5.74	7.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS4	Middle	9.7	2	1	18:37	26.9	7.66	27.4	6.24	6.91	7.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS4	Middle	9.7	2	2	18:37	26.9	7.64	27.2	6.23	6.94	8.1
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	8.4	3	1	18:37	27.2	7.75	27.5	6.54	6.2	7.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	8.4	3	2	18:37	27.1	7.72	27.4	6.51	6.23	7.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	15:51	26.6	7.73	27.1	6.91	4.75	5.4
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	15:51	26.5	7.71	27	6.93	4.75	5.9

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	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	1	15:51	26.8	7.7	27.2	6.34	4.95	6.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	2	15:51	26.7	7.69	27.1	6.33	4.94	6.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13	3	1	15:51	27.1	7.73	27.4	6.51	5.16	6.9
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13	3	2	15:51	27	7.72	27.3	6.53	5.14	7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	17:57	26.5	7.73	26.9	7.35	6.4	7.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	17:57	26.6	7.72	27	7.33	6.42	7.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.3	2	1	17:57	26.6	7.66	27.1	7.1	6.72	8
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.3	2	2	17:57	26.7	7.67	27.1	7.12	6.69	7.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.6	3	1	17:57	27	7.88	27.5	6.98	7.06	8.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.6	3	2	17:57	27	7.85	27.3	7	7.02	8.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	17:37	26.5	7.65	27.2	6.98	8.12	9.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	17:37	26.4	7.64	27.2	7	8.13	9.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.6	2	1	17:37	26.7	7.72	27.4	7.14	7.8	8.9
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.6	2	2	17:37	26.7	7.73	27.3	7.13	7.82	9.1
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.2	3	1	17:37	26.9	7.82	27.6	7.05	8.27	9.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.2	3	2	17:37	26.8	7.81	27.7	7.02	8.24	10.1
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	18:17	26.5	7.66	27.2	6.25	5.4	6.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	18:17	26.5	7.64	27.2	6.27	5.41	6.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.1	2	1	18:17	26.6	7.76	27.5	6.17	7.09	8.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.1	2	2	18:17	26.7	7.74	27.3	6.13	7.05	8.1
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	11.2	3	1	18:17	27	7.82	27.5	6.51	7.18	8.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	11.2	3	2	18:17	26.9	7.85	27.5	6.48	7.14	8.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	17:17	26.5	7.74	27.1	7.12	8.12	9.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	17:17	26.4	7.74	27.1	7.11	8.11	9.3
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.5	2	1	17:17	26.7	7.6	27.3	7.26	7.98	8.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.5	2	2	17:17	26.7	7.63	27.2	7.27	7.96	8.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10	3	1	17:17	26.9	7.88	27.5	7.19	8.68	9.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10	3	2	17:17	26.9	7.86	27.5	7.21	8.64	9.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	16:38	26.9	7.61	27.1	6.39	6.17	7.3
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	16:38	26.7	7.64	27.1	6.41	6.16	7.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	16:38						
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	16:38						
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.6	3	1	16:38	27.1	7.71	27.3	6.14	7.93	8.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.6	3	2	16:38	27	7.69	27.4	6.16	7.93	8.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	16:58	26.7	7.64	27.2	6.49	5.93	6.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	16:58	26.7	7.66	27.2	6.51	5.92	6.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	16:58						
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	16:58						
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	1	16:58	26.9	7.7	27.3	6.12	5.41	6.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	2	16:58	26.9	7.71	27.2	6.13	5.43	6.9
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	16:17	26.6	7.79	27.1	6.16	4.72	5.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	16:17	26.7	7.78	27.1	6.15	4.7	5.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.9	2	1	16:17	26.9	7.84	27.2	6.02	6.61	7.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.9	2	2	16:17	26.8	7.85	27.2	6.02	6.59	7.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.8	3	1	16:17	27.1	7.65	27.4	6.01	6.98	8.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.8	3	2	16:17	27	7.64	27.3	5.98	6.96	8.1
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	09:44	26.6	7.7	27.1	5.38	8.02	9.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	09:44	26.6	7.69	27.2	5.4	7.9	9.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS4	Middle	9.3	2	1	09:44	26.4	7.74	27.4	5.09	9.31	10.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS4	Middle	9.3	2	2	09:44	26.2	7.75	27.4	5.07	9.42	10.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS4	Bottom	17.6	3	1	09:44	25.9	7.82	27.8	4.8	11.72	12.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS4	Bottom	17.6	3	2	09:44	25.8	7.79	27.9	4.77	11.5	12.9
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	12:25	26.6	7.62	27.3	5.37	7.61	8.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	12:25	26.6	7.77	27.3	5.4	7.6	8.9
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS6	Middle	6.6	2	1	12:25	26.2	7.73	27.5	5.12	8.37	9.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS6	Middle	6.6	2	2	12:25	26.2	7.76	27.5	5.13	8.42	9.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS6	Bottom	12.2	3	1	12:25	25.9	7.77	27.7	4.77	10.12	11.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	CS6	Bottom	12.2	3	2	12:25	25.9	7.76	27.7	4.76	10.21	11.7

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	2014-11-05	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	10:25	26.6	7.6	27.1	5.46	7.69	8.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	10:25	26.6	7.7	27.1	5.38	8	8.4
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	1	10:25	26.4	7.66	27.3	5.17	8.93	9.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.1	2	2	10:25	26.3	7.69	27.3	5.1	9.03	10.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.2	3	1	10:25	25.9	7.79	27.7	4.77	10.71	12.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.2	3	2	10:25	26	7.76	27.7	4.8	10.77	11.9
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	10:45	26.6	7.69	27.1	5.44	6.96	8.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	10:45	26.6	7.68	27.1	5.4	7.31	8.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.4	2	1	10:45	26.2	7.71	27.4	5.12	8.2	9.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.4	2	2	10:45	26.3	7.72	27.4	5.08	8.06	9.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS13	Bottom	9.8	3	1	10:45	25.9	7.77	27.7	4.79	9.97	10.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS13	Bottom	9.8	3	2	10:45	25.9	7.79	27.9	4.86	9.83	11.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	10:20	26.7	7.66	27.2	5.4	7.81	8.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	10:20	26.6	7.67	27.2	5.3	7.8	9.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS14	Middle	5.8	2	1	10:20	26.4	7.71	27.4	5.1	9.24	10.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS14	Middle	5.8	2	2	10:20	26.3	7.73	27.4	5.08	9.26	10.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS14	Bottom	10.6	3	1	10:20	25.9	7.76	27.8	4.76	11.04	12.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS14	Bottom	10.6	3	2	10:20	26	7.76	27.6	4.7	11.32	12.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	11:05	26.7	7.63	27.2	5.33	7.3	7.4
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	11:05	26.6	7.61	27.1	5.39	7.5	7.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.2	2	1	11:05	26.3	7.7	27.6	5.07	9.06	10.3
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.2	2	2	11:05	26.3	7.77	27.5	5	8.56	10.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS15	Bottom	9.3	3	1	11:05	25.9	7.7	27.9	4.73	10.31	11.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	IS15	Bottom	9.3	3	2	11:05	26	7.76	27.8	4.76	10.56	11.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	11:45	26.7	7.69	27.1	5.4	7.21	8.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	11:45	26.7	7.63	27.1	5.44	7.33	8.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	11:45						
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	11:45						
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.1	3	1	11:45	26.4	7.7	27.4	4.96	8.66	9.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.1	3	2	11:45	26.3	7.74	27.3	4.99	8.37	9.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	11:25	26.6	7.52	27.3	5.4	7.33	8.3
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	11:25	26.7	7.62	27.2	5.46	7	8.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	11:25						
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	11:25						
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	1	11:25	26.3	7.66	27.6	4.86	9.32	10.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	2	11:25	26.3	7.71	27.5	4.9	9.52	10.8
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	12:05	26.6	7.66	27.2	5.3	7.03	8.2
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	12:05	26.7	7.69	27.2	5.4	7.21	8.6
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR10A	Middle	7.6	2	1	12:05	26.3	7.7	27.5	5.06	8.69	9.7
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR10A	Middle	7.6	2	2	12:05	26.3	7.71	27.5	5.08	8.79	9.4
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	14.2	3	1	12:05	26	7.73	27.6	4.79	9.67	11.5
TMCLKL	HY/2012/08	2014-11-05	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	14.2	3	2	12:05	25.9	7.75	27.7	4.8	9.97	11.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	19:39	27	7.8	27.1	6.44	5.54	6.4
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	19:39	27	7.82	27.2	6.46	5.56	6.3
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS4	Middle	9.7	2	1	19:39	27.1	7.63	27.3	6.23	6.52	6.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS4	Middle	9.7	2	2	19:39	27.2	7.65	27.3	6.25	6.5	6.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	18.3	3	1	19:39	27.3	7.75	27.4	6.57	6.13	6.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	18.3	3	2	19:39	27.4	7.77	27.5	6.59	6.15	6.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	16:56	27	7.66	27.1	7.02	4.71	5.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	16:56	27.1	7.68	27.2	7	4.69	5.4
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	1	16:56	27.2	7.73	27.3	6.37	4.88	5.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	2	16:56	27.3	7.75	27.3	6.35	4.85	5.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.9	3	1	16:56	27.4	7.82	27.5	6.54	5.04	6.1
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.9	3	2	16:56	27.5	7.8	27.4	6.52	5.06	5.9
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	18:56	27	7.74	27	7.37	6.33	7.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	18:56	26.9	7.76	27	7.39	6.3	7.4
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.2	2	1	18:56	27.1	7.82	27.1	7.11	6.54	7.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.2	2	2	18:56	27.1	7.84	27.2	7.09	6.56	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	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.4	3	1	18:56	27.3	7.66	27.4	6.96	7.03	8.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.4	3	2	18:56	27.2	7.64	27.4	6.98	7.07	8.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	18:36	27.1	7.73	27	7.03	7.73	8.9
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	18:36	27.1	7.75	27	7.01	7.75	9.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.6	2	1	18:36	27.2	7.86	27.2	7.14	7.62	9.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS13	Middle	5.6	2	2	18:36	27.3	7.84	27.1	7.16	7.6	9.4
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.1	3	1	18:36	27.4	7.67	27.3	7	7.82	9.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	10.1	3	2	18:36	27.4	7.65	27.4	7.02	7.84	9.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	19:16	27.1	7.63	27.1	6.24	5.31	6.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	19:16	27.2	7.65	27.2	6.26	5.29	6.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.1	2	1	19:16	27.3	7.72	27.3	6.14	7.04	8.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.1	2	2	19:16	27.3	7.7	27.4	6.16	7.06	8.1
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	11.1	3	1	19:16	27.4	7.84	27.5	6.55	7.11	8.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	11.1	3	2	19:16	27.5	7.82	27.5	6.57	7.13	8.3
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	18:16	27	7.63	27.1	7.13	7.63	6.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	18:16	27.1	7.65	27.2	7.15	7.61	6.9
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.5	2	1	18:16	27.2	7.72	27.3	7.23	6.95	8.1
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.5	2	2	18:16	27.2	7.7	27.3	7.25	6.93	7.9
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	9.9	3	1	18:16	27.4	7.8	27.4	7.17	7.71	8.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	9.9	3	2	18:16	27.3	7.82	27.5	7.19	7.73	8.9
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	17:36	26.9	7.76	27.1	6.47	5.92	7.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	17:36	27	7.78	27.1	6.49	5.94	6.9
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	17:36						
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	17:36						
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.3	3	1	17:36	27.2	7.69	27.3	6.13	7.06	8.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.3	3	2	17:36	27.2	7.67	27.4	6.15	7.08	8.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	17:56	26.9	7.74	27	6.63	5.42	6.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	17:56	27	7.76	27.1	6.65	5.44	6.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	17:56						
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	17:56						
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.5	3	1	17:56	27.2	7.62	27.2	6.11	5.63	6.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.5	3	2	17:56	27.3	7.64	27.3	6.13	5.61	6.1
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	17:16	27.1	7.63	27.1	6.24	4.63	5.4
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	17:16	27.2	7.61	27	6.26	4.65	5.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.8	2	1	17:16	27.3	7.59	27.2	6.11	6.32	7.3
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.8	2	2	17:16	27.3	7.6	27.3	6.09	6.3	7.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.6	3	1	17:16	27.4	7.74	27.4	5.99	6.84	7.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.6	3	2	17:16	27.4	7.76	27.5	6.01	6.82	8.1
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	11:15	26.8	7.68	27.2	6.31	5.77	6.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	11:15	26.8	7.65	27.2	6.28	5.8	6.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	9.5	2	1	11:15	27	7.72	27.5	6.18	6.98	7.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	9.5	2	2	11:15	27	7.7	27.4	6.16	7.01	8.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	18	3	1	11:15	27.3	7.82	27.6	6.48	6.27	7.4
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	18	3	2	11:15	27.3	7.79	27.6	6.44	6.3	7.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	14:25	26.7	7.77	27.2	6.85	4.82	5.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	14:25	26.7	7.75	27.2	6.88	4.83	5.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.8	2	1	14:25	26.9	7.75	27.3	6.28	5.02	6.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.8	2	2	14:25	26.9	7.73	27.3	6.26	5	6.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.6	3	1	14:25	27.2	7.79	27.5	6.47	5.21	6.4
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.6	3	2	14:25	27.2	7.77	27.5	6.5	5.19	6.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	12:07	26.6	7.78	27	7.28	6.48	7.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	12:07	26.7	7.77	27.1	7.26	6.44	7.3
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	1	12:07	26.7	7.71	27.2	7.04	6.78	8
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.1	2	2	12:07	26.8	7.73	27.3	7.05	6.74	7.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	1	12:07	27.1	7.93	27.6	6.92	7.12	8.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.2	3	2	12:07	27.1	7.9	27.5	6.93	7.08	8.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	12:30	26.6	7.73	27.3	6.92	8.17	9.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	12:30	26.7	7.7	27.3	6.95	8.2	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	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.4	2	1	12:30	26.8	7.77	27.5	7.08	7.86	8.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	5.4	2	2	12:30	26.9	7.76	27.4	7.06	7.87	8.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	9.8	3	1	12:30	27	7.88	27.7	6.97	8.33	9.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	9.8	3	2	12:30	27	7.87	27.8	6.94	8.3	9.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	11:44	26.6	7.73	27.3	6.19	5.45	6.3
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	11:44	26.7	7.71	27.3	6.21	5.47	6.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	5.9	2	1	11:44	26.7	7.82	27.5	6.11	7.15	8.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	5.9	2	2	11:44	26.8	7.8	27.5	6.07	7.11	7.9
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	10.8	3	1	11:44	27.1	7.88	27.6	6.46	7.24	8.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	10.8	3	2	11:44	27	7.9	27.6	6.42	7.2	8.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	12:53	26.7	7.79	27.2	7.06	8.18	9.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	12:53	26.6	7.8	27.3	7.05	8.16	9.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	9.3	2	1	12:53	26.8	7.65	27.4	7.2	8.04	9.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	9.3	2	2	12:53	26.8	7.69	27.3	7.21	8.01	8.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	9.6	3	1	12:53	27	7.94	27.6	7.12	8.74	9.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	9.6	3	2	12:53	27	7.92	27.5	7.15	8.71	9.4
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	13:39	27	7.66	27.2	6.31	6.23	7.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	13:39	26.8	7.69	27.2	6.34	6.21	7.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	13:39						
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	13:39						
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	1	13:39	27.2	7.77	27.4	6.08	7.99	8.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.2	3	2	13:39	27.2	7.75	27.6	6.09	7.98	8.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	13:16	26.8	7.7	27.3	6.43	5.98	6.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	13:16	26.8	7.72	27.3	6.46	5.96	6.6
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	13:16						
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	13:16						
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.2	3	1	13:16	27	7.75	27.4	6.07	5.48	6.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.2	3	2	13:16	27	7.77	27.4	6.08	5.5	6.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	14:02	26.7	7.84	27.2	6.1	4.78	5.8
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	14:02	26.8	7.82	27.3	6.08	4.75	5.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.7	2	1	14:02	27	7.88	27.3	5.97	6.67	7.7
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.7	2	2	14:02	27	7.91	27.4	5.96	6.64	7.5
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	14.4	3	1	14:02	27.2	7.71	27.5	5.96	7.03	8.2
TMCLKL	HY/2012/08	2014-11-07	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	14.4	3	2	14:02	27.1	7.69	27.5	5.92	7.01	8.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	11:15	25.8	8.03	26.8	6.24	6.77	7.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	11:15	25.8	8.03	26.8	6.2	6.71	7.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.2	2	1	11:15	26.1	8.03	27.3	6.01	7.34	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.2	2	2	11:15	26	8.04	27.3	6.04	7.3	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.4	3	1	11:15	26.1	8.04	27.4	5.86	7.6	8.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.4	3	2	11:15	26.2	8.04	27.3	5.83	7.64	8.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	08:30	25.6	7.98	27	6.24	6.43	7.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	08:30	25.7	7.99	26.9	6.2	6.48	7.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7.1	2	1	08:30	25.9	7.99	27.3	5.77	6.97	8.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7.1	2	2	08:30	26	8.01	27.4	5.73	6.91	8.3
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13.2	3	1	08:30	26.1	8.01	27.4	5.74	7.23	8.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13.2	3	2	08:30	26.1	8.02	27.5	5.78	7.2	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	10:37	25.8	8.01	26.9	6.04	7.29	8.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	10:37	25.8	8.02	26.8	6.08	7.21	8.3
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.4	2	1	10:37	26.1	8.02	27	5.81	7.48	8.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.4	2	2	10:37	26.1	8.02	27.1	5.83	7.44	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.8	3	1	10:37	26.2	8.04	27.3	5.86	7.6	8.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.8	3	2	10:37	26.1	8.03	27.2	5.82	7.65	8.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	10:20	25.7	8.01	26.8	6.18	6.98	7.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	10:20	25.8	8.02	26.9	6.15	6.93	7.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	1	10:20	26.1	8.02	27.3	5.84	7.9	9.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	2	10:20	26.1	8.03	27.3	5.79	7.94	9.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	1	10:20	26.2	8.03	27.4	5.76	7.92	9.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	2	10:20	26.2	8.04	27.4	5.72	7.95	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	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	10:53	25.8	8.03	26.8	6.11	6.98	7.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	10:53	25.7	8.04	26.7	6.09	6.95	7.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.9	2	1	10:53	26.1	8.04	27.3	5.91	7.11	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.9	2	2	10:53	26.2	8.04	27.2	5.95	7.07	8.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	12.8	3	1	10:53	26.2	8.05	27.3	5.74	7.54	8.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	12.8	3	2	10:53	26.2	8.04	27.3	5.71	7.5	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	10:00	25.6	8.02	26.9	6.2	7.27	8
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	10:00	25.7	8.02	26.9	6.17	7.3	8.3
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.9	2	1	10:00	26.1	8.03	27.2	5.95	7.84	8.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.9	2	2	10:00	26	8.02	27.3	5.98	7.8	8.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.8	3	1	10:00	26.1	8.03	27.3	5.9	7.77	8.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.8	3	2	10:00	26.2	8.03	27.4	5.94	7.75	9.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	09:29	25.7	8	26.8	6.11	6.54	7.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	09:29	25.8	8.01	26.7	6.08	6.5	7.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	09:29						
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	09:29						
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	1	09:29	26	8.02	27.5	5.84	7.89	9.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	2	09:29	26	8.01	27.4	5.8	7.84	8.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	09:44	25.7	8.04	26.7	6.15	7.04	6.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	09:44	25.7	8.03	26.7	6.11	7.08	7.3
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	09:44						
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	09:44						
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	1	09:44	26	8.05	27.1	5.76	7.72	8.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	2	09:44	26	8.04	27.2	5.73	7.67	8.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	09:00	25.7	8.01	26.9	6.34	5.99	6.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	09:00	25.7	8.01	26.8	6.37	5.91	6.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.9	2	1	09:00	26.2	8.02	27.4	6.02	7.28	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.9	2	2	09:00	26.1	8.03	27.4	6.04	7.22	8.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.8	3	1	09:00	26.2	8.03	27.5	5.9	7.12	8.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.8	3	2	09:00	26.2	8.02	27.4	5.94	7.06	7.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	13:19	25.9	8.05	26.9	6.17	6.84	7.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	13:19	25.9	8.07	26.9	6.14	6.8	7.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10	2	1	13:19	26.2	8.08	27.4	5.95	7.41	8.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10	2	2	13:19	26.1	8.11	27.4	5.97	7.37	8.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.6	3	1	13:19	26.3	8.09	27.5	5.79	7.65	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	19.6	3	2	13:19	26.4	8.12	27.5	5.77	7.7	8.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	16:05	25.8	8.05	27.1	6.18	6.49	7.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	16:05	25.8	8.07	27	6.13	6.54	7
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.9	2	1	16:05	26	8.04	27.4	5.7	7.04	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.9	2	2	16:05	26.2	8.07	27.5	5.68	7.01	7.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.8	3	1	16:05	26.2	8.05	27.5	5.67	7.29	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.8	3	2	16:05	26.3	8.08	27.6	5.7	7.27	8.3
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	14:05	25.9	8.07	27	6	7.35	8.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	14:05	25.9	8.09	26.9	6.02	7.29	8.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.2	2	1	14:05	26.2	8.07	27.1	5.74	7.54	8.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.2	2	2	14:05	26.3	8.06	27.2	5.78	7.5	8.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.4	3	1	14:05	26.3	8.09	27.4	5.8	7.65	8.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.4	3	2	14:05	26.2	8.07	27.3	5.76	7.7	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	14:25	25.8	8.07	26.9	6.11	7.05	7.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	14:25	25.9	8.09	27	6.09	7	8.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6	2	1	14:25	26.2	8.07	27.4	5.77	7.95	8.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6	2	2	14:25	26.2	8.08	27.4	5.74	7.99	8.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11	3	1	14:25	26.3	8.09	27.5	5.68	7.98	9.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11	3	2	14:25	26.3	8.11	27.6	5.65	7.99	9.3
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	13:45	25.9	8.09	26.9	6.04	7.05	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	13:45	25.9	8.12	26.9	6	7.02	8.3
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	6.7	2	1	13:45	26.2	8.1	27.4	5.86	7.18	8.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	6.7	2	2	13:45	26.3	8.09	27.4	5.89	7.14	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	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	12.4	3	1	13:45	26.3	8.12	27.4	5.67	7.6	9.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	12.4	3	2	13:45	26.3	8.11	27.5	5.64	7.57	8.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	14:45	25.7	8.08	27	6.14	7.33	8.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	14:45	25.8	8.06	27.1	6.1	7.36	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.7	2	1	14:45	26.2	8.08	27.3	5.88	7.9	8.9
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.7	2	2	14:45	26.2	8.06	27.4	5.9	7.87	9.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.4	3	1	14:45	26.2	8.09	27.4	5.84	7.83	8.6
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.4	3	2	14:45	26.4	8.08	27.5	5.88	7.81	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	15:25	25.8	8.05	26.9	6.02	6.6	7.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	15:25	25.9	8.07	26.9	6.01	6.57	7.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	15:25						
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	15:25						
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.4	3	1	15:25	26.2	8.05	27.6	5.78	7.94	9.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.4	3	2	15:25	26.1	8.04	27.5	5.74	7.9	8.8
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	15:05	25.8	8.1	26.8	6.09	7.1	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	15:05	25.8	8.08	26.8	6.05	7.14	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	15:05						
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	15:05						
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.2	3	1	15:05	26.2	8.09	27.2	5.7	7.79	8.7
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.2	3	2	15:05	26.1	8.07	27.3	5.67	7.75	8.5
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	15:45	25.8	8.08	27	6.28	6.05	7.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	15:45	25.9	8.07	26.9	6.3	6	7.3
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.7	2	1	15:45	26.3	8.07	27.5	5.95	7.34	8.2
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.7	2	2	15:45	26.2	8.09	27.5	5.98	7.29	8.4
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	14.4	3	1	15:45	26.3	8.07	27.6	5.84	7.18	8.1
TMCLKL	HY/2012/08	2014-11-10	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	14.4	3	2	15:45	26.4	8.04	27.5	5.88	7.12	8.1
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	12:53	25.7	8.04	26.7	6.31	6.69	7.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	12:53	25.8	8.05	26.8	6.28	6.75	7.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.2	2	1	12:53	25.9	8.08	27.2	6	7.08	7.9
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.2	2	2	12:53	26	8.09	27.1	5.98	7.16	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.4	3	1	12:53	26.2	8.12	27.4	5.88	7.63	8.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.4	3	2	12:53	26.2	8.1	27.5	5.86	7.56	8.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	10:07	25.4	8.01	26.9	6.32	6.24	7.5
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	10:07	25.5	8.02	27	6.28	6.32	7.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	1	10:07	25.8	8.04	27.4	5.84	6.86	7.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	2	10:07	25.9	8.05	27.5	5.81	6.92	7.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13	3	1	10:07	26.1	8.09	27.5	5.76	7.08	8
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	13	3	2	10:07	26.1	8.1	27.6	5.73	7.14	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	12:10	25.6	8.07	26.8	6.18	7.09	8.1
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	12:10	25.7	8.08	26.9	6.15	7.14	8.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.4	2	1	12:10	26.1	8.08	27	5.93	7.36	8.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.4	2	2	12:10	26.1	8.09	27.1	5.91	7.41	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.8	3	1	12:10	26.1	8.1	27.2	5.86	7.66	8.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.8	3	2	12:10	26.2	8.11	27.3	5.83	7.72	9
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	11:48	25.7	8.04	26.9	6.21	6.96	7.5
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	11:48	25.8	8.05	26.9	6.19	7.02	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	1	11:48	25.9	8.06	27.2	6.01	7.78	8.9
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	2	11:48	26	8.07	27.2	5.98	7.84	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	1	11:48	26.1	8.07	27.3	5.87	7.98	9.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	2	11:48	26.2	8.08	27.4	5.84	8.03	9.5
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	12:32	25.7	8.03	26.9	6.24	7.08	8.1
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	12:32	25.6	8.04	27	6.27	7	8.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.8	2	1	12:32	26	8.06	27.1	6.08	7.21	8.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.8	2	2	12:32	26.1	8.07	27.2	6.05	7.27	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	12.6	3	1	12:32	26.1	8.06	27.4	5.94	7.48	8.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	12.6	3	2	12:32	26.1	8.07	27.5	5.9	7.54	8.9
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	11:28	25.6	8.04	26.9	6.27	7.18	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	11:28	25.7	8.05	27	6.24	7.24	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	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.9	2	1	11:28	25.8	8.02	27.1	6.06	7.69	8.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.9	2	2	11:28	25.9	8.03	27.2	6.03	7.73	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.8	3	1	11:28	26.1	8.06	27.4	5.95	7.86	8.9
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.8	3	2	11:28	26.2	8.07	27.4	5.92	7.79	8.5
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	10:56	25.6	8.02	26.9	6.24	6.42	7.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	10:56	25.7	8.01	26.9	6.21	6.48	7.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	10:56						
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	10:56						
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	1	10:56	25.8	8.02	27.4	5.93	7.63	8.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	2	10:56	25.9	8.03	27.4	5.88	7.7	8.9
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	11:11	25.7	8.02	26.7	6.18	6.79	7.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	11:11	25.7	8.03	26.8	6.2	6.84	7.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	11:11						
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	11:11						
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	1	11:11	26	8.08	27.1	5.87	7.53	8.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.6	3	2	11:11	26	8.09	27.2	5.83	7.6	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	10:32	25.5	8.1	26.8	6.54	5.88	6.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	10:32	25.6	8.11	26.8	6.51	5.94	6.5
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.8	2	1	10:32	25.9	8.1	27.2	6.23	6.74	7.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.8	2	2	10:32	25.9	8.11	27.3	6.2	6.83	7.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.6	3	1	10:32	26.1	8.07	27.5	6.08	6.96	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.6	3	2	10:32	26.2	8.08	27.6	6.04	7.03	8.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	14:45	25.8	8.07	26.8	6.15	6.82	7.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	14:45	25.9	8.06	26.9	6.18	6.85	8.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10	2	1	14:45	26.2	8.12	27.4	5.97	7.38	8.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10	2	2	14:45	26.2	8.08	27.3	5.96	7.43	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	18.9	3	1	14:45	26.4	8.14	27.5	5.79	7.72	8.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	18.9	3	2	14:45	26.3	8.11	27.5	5.81	7.68	9
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	17:31	25.8	8.04	27	6.13	6.54	7.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	17:31	25.9	8.06	27.1	6.18	6.49	7.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.9	2	1	17:31	26.2	8.07	27.5	5.69	7.01	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.9	2	2	17:31	26.1	8.04	27.5	5.7	7.03	8.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.7	3	1	17:31	26.3	8.08	27.6	5.7	7.27	8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	12.7	3	2	17:31	26.3	8.06	27.6	5.68	7.3	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	15:31	25.9	8.09	26.9	6.03	7.3	8.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	15:31	25.8	8.08	27	6.01	7.36	8.5
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.2	2	1	15:31	26.3	8.07	27.2	5.79	7.51	8.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.2	2	2	15:31	26.3	8.07	27.2	5.75	7.55	8.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.4	3	1	15:31	26.3	8.07	27.4	5.77	7.7	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	13.4	3	2	15:31	26.3	8.1	27.4	5.82	7.65	8.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	15:51	25.9	8.09	27	6.1	7.01	8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	15:51	25.9	8.07	27	6.12	7.07	8.1
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6.1	2	1	15:51	26.2	8.08	27.4	5.75	7.99	9
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6.1	2	2	15:51	26.1	8.08	27.3	5.78	7.93	8.7
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11.1	3	1	15:51	26.3	8.12	27.6	5.65	7.99	9.1
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11.1	3	2	15:51	26.3	8.1	27.5	5.69	7.96	9.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	15:11	25.9	8.12	26.9	6.01	7.01	8.1
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	15:11	25.9	8.1	26.9	6.05	7.06	8.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	6.7	2	1	15:11	26.3	8.1	27.4	5.9	7.12	8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	6.7	2	2	15:11	26.3	8.11	27.5	5.85	7.18	8.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	12.3	3	1	15:11	26.3	8.11	27.5	5.66	7.59	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	12.3	3	2	15:11	26.4	8.12	27.5	5.69	7.63	8.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	16:11	25.8	8.06	27.1	6.1	7.37	8.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	16:11	25.8	8.07	27.1	6.13	7.32	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.7	2	1	16:11	26.2	8.06	27.4	5.91	7.89	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	5.7	2	2	16:11	26.2	8.08	27.3	5.89	7.91	8.9
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.3	3	1	16:11	26.3	8.09	27.5	5.89	7.8	8.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	10.3	3	2	16:11	26.3	8.09	27.5	5.85	7.84	8.9

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	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	16:51	25.9	8.07	26.9	6.01	6.57	7.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	16:51	25.9	8.06	26.8	6.03	6.59	7.6
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	16:51						
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	16:51						
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.3	3	1	16:51	26.1	8.04	27.6	5.74	7.9	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.3	3	2	16:51	26.2	8.04	27.6	5.79	7.95	8.5
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	16:31	25.9	8.08	26.8	6.05	7.12	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	16:31	25.8	8.09	26.7	6.1	7.08	8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	16:31						
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	16:31						
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.3	3	1	16:31	26.1	8.08	27.4	5.67	7.76	8.8
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.3	3	2	16:31	26.2	8.1	27.2	5.71	7.8	9.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	17:11	25.9	8.07	26.9	6.3	6.01	7.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	17:11	25.8	8.07	27	6.28	6.05	7.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.7	2	1	17:11	26.2	8.09	27.5	5.98	7.29	8.2
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	7.7	2	2	17:11	26.3	8.08	27.4	5.96	7.33	8.3
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	14.4	3	1	17:11	26.4	8.04	27.6	5.88	7.12	8.4
TMCLKL	HY/2012/08	2014-11-12	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	14.4	3	2	17:11	26.4	8.06	27.6	5.85	7.17	8.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	18:38	24.6	7.66	27	6.24	6.63	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	18:38	24.7	7.68	27.1	6.26	6.65	7.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.2	2	1	18:38	24.8	7.74	27.2	6.33	6.88	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.2	2	2	18:38	24.9	7.76	27.3	6.35	6.86	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.3	3	1	18:38	25	7.81	27.4	6.17	6.99	8.1
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	19.3	3	2	18:38	25	7.79	27.5	6.15	7.01	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	15:56	24.5	7.73	27	6.67	6.73	7.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	15:56	24.6	7.75	27.1	6.69	6.71	7.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	1	15:56	24.7	7.63	27.2	6.72	6.45	7.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS6	Middle	7	2	2	15:56	24.8	7.61	27.3	6.74	6.47	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.9	3	1	15:56	25	7.85	27.5	6.63	6.82	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	12.9	3	2	15:56	24.9	7.83	27.4	6.65	6.8	8.2
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	18:00	24.5	7.66	27.1	6.49	6.72	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	18:00	24.5	7.68	27.2	6.51	6.7	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.4	2	1	18:00	24.6	7.73	27.3	6.42	6.85	7.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.4	2	2	18:00	24.7	7.75	27.3	6.44	6.87	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.7	3	1	18:00	24.8	7.84	27.4	6.21	7.04	8.2
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	13.7	3	2	18:00	24.9	7.86	27.5	6.19	7.06	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	17:36	24.5	7.63	27.1	6.57	6.71	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	17:36	24.5	7.61	27.1	6.6	6.73	7.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.3	2	1	17:36	24.6	7.67	27.2	6.49	6.81	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.3	2	2	17:36	24.7	7.69	27.3	6.51	6.83	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.5	3	1	17:36	24.8	7.75	27.4	6.44	7.04	8.1
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.5	3	2	17:36	24.9	7.77	27.5	6.46	7.02	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	18:19	24.6	7.74	27	6.39	7.13	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	18:19	24.5	7.76	27.1	6.41	7.11	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.2	2	1	18:19	24.7	7.83	27.2	6.35	6.94	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS14	Middle	6.2	2	2	18:19	24.8	7.81	27.3	6.37	6.96	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	11.4	3	1	18:19	24.9	7.62	27.4	6.22	7.21	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	11.4	3	2	18:19	25	7.6	27.5	6.2	7.19	8.1
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	17:17	24.6	7.85	27.1	6.47	6.62	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	17:17	24.7	7.87	27.2	6.45	6.6	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.8	2	1	17:17	24.8	7.72	27.3	6.56	6.73	7.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS15	Middle	5.8	2	2	17:17	24.9	7.7	27.4	6.58	6.71	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.6	3	1	17:17	25	7.63	27.5	6.33	6.85	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	10.6	3	2	17:17	25	7.65	27.6	6.35	6.87	7.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	16:42	24.5	7.75	27.1	6.49	6.63	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	16:42	24.6	7.77	27.2	6.51	6.65	7.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	16:42						
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	16:42						

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	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.4	3	1	16:42	24.8	7.83	27.4	6.43	6.71	8.1
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.4	3	2	16:42	24.9	7.81	27.5	6.45	6.69	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	16:57	24.6	7.72	27	6.51	6.73	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	16:57	24.5	7.7	27.1	6.53	6.71	7.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	16:57						
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	16:57						
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.4	3	1	16:57	24.7	7.8	27.3	6.49	6.8	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.4	3	2	16:57	24.8	7.82	27.4	6.47	6.82	8.1
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	16:21	24.6	7.64	27	6.79	6.56	7.2
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	16:21	24.6	7.66	27	6.81	6.58	7.6
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.8	2	1	16:21	24.7	7.72	27.1	6.62	6.73	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	7.8	2	2	16:21	24.8	7.7	27.2	6.64	6.75	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.5	3	1	16:21	24.9	7.83	27.3	6.71	6.92	8.2
TMCLKL	HY/2012/08	2014-11-14	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	14.5	3	2	16:21	25	7.81	27.4	6.69	6.9	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS4	Surface	1	1	1	04:15	24.8	7.98	26.9	6.18	6.83	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS4	Surface	1	1	2	04:15	24.8	7.99	27	6.15	6.78	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS4	Middle	10	2	1	04:15	24.9	7.89	27.1	6.23	6.99	8.1
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS4	Middle	10	2	2	04:15	25	7.9	27.2	6.25	7.04	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS4	Bottom	19	3	1	04:15	25.1	7.92	27.3	6.09	7.42	8.6
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS4	Bottom	19	3	2	04:15	25.2	7.93	27.4	6.06	7.34	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS6	Surface	1	1	1	06:25	24.6	7.98	27	6.58	6.85	7.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS6	Surface	1	1	2	06:25	24.6	7.99	27.1	6.55	6.8	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS6	Middle	6.8	2	1	06:25	24.6	7.89	27.1	6.61	6.66	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS6	Middle	6.8	2	2	06:25	24.7	7.9	27.2	6.63	6.71	7.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS6	Bottom	12.6	3	1	06:25	24.7	7.92	27.2	6.51	6.94	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	CS6	Bottom	12.6	3	2	06:25	24.8	7.93	27.3	6.47	7.03	8.1
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS12	Surface	1	1	1	04:56	24.7	7.98	27	6.37	6.89	7.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS12	Surface	1	1	2	04:56	24.7	7.99	27	6.34	6.94	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS12	Middle	7.2	2	1	04:56	24.7	7.94	27.1	6.3	7.06	8.2
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS12	Middle	7.2	2	2	04:56	24.8	7.95	27.2	6.27	7.11	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS12	Bottom	13.4	3	1	04:56	24.9	7.97	27.2	6.08	7.18	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS12	Bottom	13.4	3	2	04:56	25	7.98	27.3	6.11	7.24	8.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS13	Surface	1	1	1	05:14	24.7	7.92	27	6.42	6.76	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS13	Surface	1	1	2	05:14	24.6	7.93	27.1	6.39	6.83	7.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS13	Middle	6.1	2	1	05:14	24.7	7.94	27.1	6.45	6.88	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS13	Middle	6.1	2	2	05:14	24.7	7.94	27.1	6.43	6.95	8.2
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS13	Bottom	11.2	3	1	05:14	24.8	7.97	27.2	6.36	7.14	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS13	Bottom	11.2	3	2	05:14	24.9	7.98	27.3	6.32	7.1	8.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS14	Surface	1	1	1	04:38	24.8	7.93	27	6.29	7.07	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS14	Surface	1	1	2	04:38	24.7	7.94	27.1	6.33	7	8.1
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS14	Middle	6.1	2	1	04:38	24.8	7.95	27.1	6.22	7.12	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS14	Middle	6.1	2	2	04:38	24.8	7.95	27.1	6.2	7.17	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS14	Bottom	11.2	3	1	04:38	24.9	7.97	27.1	6.14	7.32	8.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS14	Bottom	11.2	3	2	04:38	25	7.98	27.2	6.11	7.38	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS15	Surface	1	1	1	05:35	24.7	7.95	26.9	6.34	6.94	8.2
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS15	Surface	1	1	2	05:35	24.7	7.95	27	6.37	6.99	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS15	Middle	5.7	2	1	05:35	24.7	7.95	27	6.4	6.83	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS15	Middle	5.7	2	2	05:35	24.7	7.96	27.1	6.38	6.8	7.7
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS15	Bottom	10.4	3	1	05:35	24.8	7.98	27.2	6.26	7.03	8.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	IS15	Bottom	10.4	3	2	05:35	24.8	7.99	27.2	6.29	7.09	8.3
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR8	Surface	1	1	1	06:07	24.6	7.94	27.1	6.38	6.74	7.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR8	Surface	1	1	2	06:07	24.6	7.95	27.1	6.35	6.81	7.6
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR8	Middle		2	1	06:07						
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR8	Middle		2	2	06:07						
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR8	Bottom	4.2	3	1	06:07	24.6	7.96	27.1	6.41	6.87	8
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR8	Bottom	4.2	3	2	06:07	24.7	7.97	27.2	6.43	6.94	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR9	Surface	1	1	1	05:52	24.7	7.99	27	6.44	6.82	7.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR9	Surface	1	1	2	05:52	24.8	7.98	27.1	6.41	6.88	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	2014-11-14	Mid-Ebb	Cloudy	Calm	SR9	Middle		2	1	05:52						
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR9	Middle		2	2	05:52						
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR9	Bottom	4.2	3	1	05:52	24.8	8	27.1	6.43	6.94	8.5
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR9	Bottom	4.2	3	2	05:52	24.8	8.01	27.2	6.46	6.99	8.6
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR10A	Surface	1	1	1	06:50	24.6	7.93	27	6.64	6.68	7.8
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR10A	Surface	1	1	2	06:50	24.5	7.94	27	6.61	6.74	7.9
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR10A	Middle	7.6	2	1	06:50	24.6	7.96	27	6.57	6.93	8.4
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR10A	Middle	7.6	2	2	06:50	24.7	7.97	27.1	6.54	6.86	8.6
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR10A	Bottom	14.2	3	1	06:50	24.8	7.99	27.2	6.6	7.21	9.2
TMCLKL	HY/2012/08	2014-11-14	Mid-Ebb	Cloudy	Calm	SR10A	Bottom	14.2	3	2	06:50	24.9	8	27.3	6.58	7.27	9.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	16:46	24.4	7.78	27	6.23	6.87	7.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	16:46	24.4	7.8	27	6.2	6.9	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS4	Middle	10.1	2	1	16:46	24.5	7.68	27.1	6.32	6.97	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS4	Middle	10.1	2	2	16:46	24.6	7.65	27.2	6.28	7	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.2	3	1	16:46	24.7	7.62	27.4	6.08	7.15	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS4	Bottom	19.2	3	2	16:46	24.7	7.65	27.4	6.12	7.14	8.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	14:00	24.4	7.6	26.9	6.54	6.96	7.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	14:00	24.5	7.63	26.9	6.56	6.95	7.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS6	Middle	7	2	1	14:00	24.6	7.68	27	6.45	7.04	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS6	Middle	7	2	2	14:00	24.6	7.7	27.1	6.44	7.02	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS6	Bottom	13	3	1	14:00	24.7	7.76	27.2	6.26	7.2	8.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	CS6	Bottom	13	3	2	14:00	24.8	7.79	27.3	6.23	7.21	8.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	16:06	24.4	7.59	27	6.35	6.95	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	16:06	24.4	7.62	27	6.39	6.96	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	1	16:06	24.5	7.68	27.2	6.31	7.04	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS12	Middle	7.3	2	2	16:06	24.6	7.65	27.2	6.3	7.08	8.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.6	3	1	16:06	24.7	7.77	27.3	6.1	7.11	8.6
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS12	Bottom	13.6	3	2	16:06	24.7	7.79	27.4	6.13	7.14	8.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	15:46	24.5	7.78	26.9	6.58	6.52	7.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	15:46	24.4	7.75	26.9	6.59	6.54	7.8
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS13	Middle	6.2	2	1	15:46	24.6	7.62	27.1	6.47	6.67	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS13	Middle	6.2	2	2	15:46	24.7	7.65	27.2	6.43	6.69	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS13	Bottom	11.4	3	1	15:46	24.8	7.67	27.3	6.1	6.8	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS13	Bottom	11.4	3	2	15:46	24.9	7.69	27.4	6.12	6.85	8.6
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	16:26	24.5	7.69	26.9	6.3	7.02	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	16:26	24.5	7.67	26.9	6.32	7.05	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS14	Middle	6.3	2	1	16:26	24.7	7.75	27.1	6.25	7.18	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS14	Middle	6.3	2	2	16:26	24.6	7.77	27.1	6.22	7.2	8.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS14	Bottom	11.5	3	1	16:26	24.8	7.61	27.3	6.18	7.37	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS14	Bottom	11.5	3	2	16:26	24.9	7.63	27.4	6.14	7.33	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	15:26	24.4	7.59	27	6.52	6.76	7.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	15:26	24.4	7.63	27.1	6.54	6.78	7.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS15	Middle	6	2	1	15:26	24.5	7.65	27.2	6.39	6.97	7.6
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS15	Middle	6	2	2	15:26	24.6	7.68	27.2	6.37	6.99	7.8
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS15	Bottom	11	3	1	15:26	24.7	7.79	27.4	6.25	7.08	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	IS15	Bottom	11	3	2	15:26	24.8	7.81	27.3	6.18	7.09	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	14:46	24.4	7.58	27	6.61	6.74	7.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	14:46	24.3	7.54	27	6.59	6.71	7.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	14:46						
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	14:46						
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.4	3	1	14:46	24.5	7.66	27.2	6.34	6.87	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR8	Bottom	4.4	3	2	14:46	24.5	7.65	27.3	6.38	6.9	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	15:06	24.4	7.65	26.9	6.42	6.95	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	15:06	24.3	7.67	27	6.45	6.98	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	15:06						
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	15:06						
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.6	3	1	15:06	24.5	7.75	27.2	6.3	7.09	7.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.6	3	2	15:06	24.6	7.77	27.2	6.32	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	2014-11-17	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	14:26	24.5	7.68	27	6.65	6.79	7.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	14:26	24.4	7.69	26.9	6.68	6.81	7.8
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR10A	Middle	7.8	2	1	14:26	24.6	7.77	27.1	6.49	6.97	7.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR10A	Middle	7.8	2	2	14:26	24.7	7.75	27.2	6.52	6.99	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR10A	Bottom	14.6	3	1	14:26	24.8	7.58	27.3	6.44	7.07	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Flood	Fine	Small Wave	SR10A	Bottom	14.6	3	2	14:26	24.9	7.62	27.4	6.46	7.09	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	07:30	24.5	7.85	27.1	6.15	6.94	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	07:30	24.5	7.87	27.1	6.13	6.96	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS4	Middle	9.9	2	1	07:30	24.6	7.73	27.2	6.26	7.03	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS4	Middle	9.9	2	2	07:30	24.7	7.71	27.3	6.24	7.05	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS4	Bottom	18.8	3	1	07:30	24.8	7.68	27.4	6	7.23	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS4	Bottom	18.8	3	2	07:30	24.9	7.7	27.5	6.02	7.21	8.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	09:39	24.5	7.66	26.9	6.47	7.02	7.8
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	09:39	24.6	7.68	27	6.49	7	8
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS6	Middle	6.8	2	1	09:39	24.7	7.73	27.1	6.39	7.13	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS6	Middle	6.8	2	2	09:39	24.8	7.75	27.2	6.37	7.11	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS6	Bottom	12.6	3	1	09:39	24.9	7.81	27.3	6.2	7.26	8.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	CS6	Bottom	12.6	3	2	09:39	24.9	7.83	27.4	6.18	7.28	8.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	08:04	24.5	7.66	27.1	6.29	7.01	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	08:04	24.5	7.68	27.2	6.31	7.03	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.2	2	1	08:04	24.6	7.73	27.3	6.25	7.12	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.2	2	2	08:04	24.7	7.71	27.3	6.23	7.14	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.3	3	1	08:04	24.8	7.83	27.4	6.04	7.27	8.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.3	3	2	08:04	24.9	7.85	27.5	6.06	7.29	8.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	08:21	24.6	7.83	27	6.5	6.59	7.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	08:21	24.6	7.81	27.1	6.52	6.61	7.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS13	Middle	6	2	1	08:21	24.7	7.69	27.2	6.4	6.73	7.8
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS13	Middle	6	2	2	08:21	24.8	7.71	27.3	6.38	6.75	7.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS13	Bottom	11	3	1	08:21	24.9	7.73	27.4	6.04	6.89	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS13	Bottom	11	3	2	08:21	25	7.73	27.5	6.06	6.91	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	07:47	24.6	7.76	27	6.21	7.11	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	07:47	24.7	7.74	27.1	6.23	7.13	8.6
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS14	Middle	6.1	2	1	07:47	24.8	7.82	27.2	6.17	7.25	8.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS14	Middle	6.1	2	2	07:47	24.7	7.84	27.3	6.15	7.27	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS14	Bottom	11.1	3	1	07:47	24.9	7.67	27.4	6.11	7.42	9
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS14	Bottom	11.1	3	2	07:47	25	7.69	27.5	6.09	7.4	8.8
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	08:38	24.6	7.66	27.1	6.44	6.82	7.8
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	08:38	24.5	7.68	27.2	6.46	6.84	7.6
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.8	2	1	08:38	24.7	7.72	27.3	6.33	7.02	8.2
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.8	2	2	08:38	24.7	7.74	27.4	6.31	7.04	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.6	3	1	08:38	24.8	7.85	27.5	6.17	7.13	8.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.6	3	2	08:38	24.9	7.87	27.5	6.15	7.15	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	09:12	24.5	7.64	27.1	6.55	6.8	7.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	09:12	24.5	7.66	27.2	6.53	6.78	7.4
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	09:12						
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	09:12						
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.1	3	1	09:12	24.6	7.72	27.3	6.28	6.94	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.1	3	2	09:12	24.7	7.7	27.4	6.3	6.96	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	08:55	24.5	7.71	27	6.35	7.02	7.8
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	08:55	24.4	7.73	27.1	6.37	7.04	7.9
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	08:55						
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	08:55						
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.3	3	1	08:55	24.6	7.8	27.2	6.24	7.17	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.3	3	2	08:55	24.7	7.82	27.3	6.26	7.19	8.3
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	09:29	24.6	7.74	27	6.59	6.86	7.7
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	09:29	24.6	7.76	27.1	6.61	6.88	7.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR10A	Middle	7.7	2	1	09:29	24.7	7.83	27.2	6.43	7.03	8.1
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR10A	Middle	7.7	2	2	09:29	24.8	7.81	27.3	6.45	7.05	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	2014-11-17	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	14.3	3	1	09:29	24.9	7.65	27.4	6.38	7.12	8.5
TMCLKL	HY/2012/08	2014-11-17	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	14.3	3	2	09:29	25	7.67	27.5	6.4	7.14	8.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS4	Surface	1	1	1	17:42	24.4	7.74	27.1	6.34	6.8	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS4	Surface	1	1	2	17:42	24.3	7.76	27	6.3	6.84	7.8
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS4	Middle	10.2	2	1	17:42	24.5	7.69	27.2	6.34	6.91	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS4	Middle	10.2	2	2	17:42	24.4	7.71	27.2	6.32	6.94	7.9
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS4	Bottom	19.3	3	1	17:42	24.6	7.66	27.4	6.14	7.1	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS4	Bottom	19.3	3	2	17:42	24.7	7.68	27.4	6.1	7.16	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS6	Surface	1	1	1	14:58	24.5	7.64	27	6.6	6.86	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS6	Surface	1	1	2	14:58	24.5	7.65	27	6.56	6.9	8
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS6	Middle	7.1	2	1	14:58	24.6	7.66	27.1	6.48	6.94	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS6	Middle	7.1	2	2	14:58	24.7	7.65	27.1	6.46	6.98	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS6	Bottom	13.1	3	1	14:58	24.6	7.75	27.2	6.28	7.04	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	CS6	Bottom	13.1	3	2	14:58	24.7	7.76	27.3	6.24	7.1	8.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS12	Surface	1	1	1	17:03	24.3	7.61	27.1	6.41	6.9	7.7
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS12	Surface	1	1	2	17:03	24.3	7.64	27.1	6.38	6.86	8
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS12	Middle	7.3	2	1	17:03	24.4	7.66	27.2	6.28	7.04	8.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS12	Middle	7.3	2	2	17:03	24.5	7.64	27.2	6.32	7.11	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS12	Bottom	13.6	3	1	17:03	24.6	7.74	27.4	6.18	7.14	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS12	Bottom	13.6	3	2	17:03	24.7	7.76	27.3	6.15	7.16	8.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS13	Surface	1	1	1	16:44	24.4	7.74	27	6.54	6.56	7.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS13	Surface	1	1	2	16:44	24.4	7.76	26.9	6.56	6.52	7.7
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS13	Middle	6.3	2	1	16:44	24.5	7.66	27.2	6.4	6.64	7.8
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS13	Middle	6.3	2	2	16:44	24.6	7.68	27.1	6.44	6.6	7.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS13	Bottom	11.5	3	1	16:44	24.7	7.69	27.3	6.2	6.74	8
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS13	Bottom	11.5	3	2	16:44	24.7	7.68	27.3	6.16	6.77	7.9
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS14	Surface	1	1	1	17:22	24.3	7.68	27	6.34	6.96	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS14	Surface	1	1	2	17:22	24.3	7.65	27	6.35	6.92	8.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS14	Middle	6.3	2	1	17:22	24.4	7.72	27.1	6.28	7.1	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS14	Middle	6.3	2	2	17:22	24.5	7.76	27.2	6.26	7.06	8
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS14	Bottom	11.6	3	1	17:22	24.7	7.64	27.4	6.16	7.23	8.7
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS14	Bottom	11.6	3	2	17:22	24.7	7.65	27.4	6.18	7.2	8.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS15	Surface	1	1	1	16:24	24.4	7.6	27	6.64	6.68	7.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS15	Surface	1	1	2	16:24	24.3	7.62	26.9	6.6	6.74	7.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS15	Middle	6.1	2	1	16:24	24.5	7.66	27.2	6.38	6.89	7.7
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS15	Middle	6.1	2	2	16:24	24.5	7.65	27.3	6.4	6.93	7.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS15	Bottom	11.1	3	1	16:24	24.7	7.8	27.4	6.26	7.13	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	IS15	Bottom	11.1	3	2	16:24	24.6	7.82	27.4	6.23	7.1	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR8	Surface	1	1	1	15:45	24.4	7.6	27.1	6.64	6.76	7.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR8	Surface	1	1	2	15:45	24.4	7.64	27	6.6	6.72	7.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR8	Middle		2	1	15:45						
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR8	Middle		2	2	15:45						
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR8	Bottom	4.5	3	1	15:45	24.6	7.65	27.2	6.3	6.82	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR8	Bottom	4.5	3	2	15:45	24.7	7.68	27.2	6.34	6.78	7.9
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR9	Surface	1	1	1	16:03	24.4	7.6	26.9	6.48	6.89	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR9	Surface	1	1	2	16:03	24.4	7.64	26.9	6.44	6.92	7.7
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR9	Middle		2	1	16:03						
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR9	Middle		2	2	16:03						
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR9	Bottom	4.6	3	1	16:03	24.6	7.72	27.2	6.34	7.12	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR9	Bottom	4.6	3	2	16:03	24.5	7.76	27.2	6.36	7	8.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR10A	Surface	1	1	1	15:24	24.6	7.67	27.1	6.64	6.68	7.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR10A	Surface	1	1	2	15:24	24.6	7.7	27	6.66	6.72	7.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR10A	Middle	7.8	2	1	15:24	24.6	7.72	27.2	6.54	6.86	7.8
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR10A	Middle	7.8	2	2	15:24	24.7	7.73	27.2	6.5	6.89	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR10A	Bottom	14.6	3	1	15:24	24.7	7.6	27.3	6.46	7.1	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Flood	Sunny	Small Wave	SR10A	Bottom	14.6	3	2	15:24	24.7	7.63	27.3	6.48	7.14	8.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	08:58	24.2	7.87	27	6.14	6.87	7.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	08:58	24.3	7.86	27.1	6.15	6.91	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	2014-11-19	Mid-Ebb	Fine	Small Wave	CS4	Middle	9.7	2	1	08:58	24.5	7.71	27	6.23	7.04	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS4	Middle	9.7	2	2	08:58	24.6	7.73	27.2	6.25	7.01	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS4	Bottom	18.3	3	1	08:58	24.8	7.67	27.3	6.03	7.21	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS4	Bottom	18.3	3	2	08:58	24.9	7.68	27.2	6.02	7.23	8.7
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	11:38	24.3	7.64	26.7	6.45	7	8
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	11:38	24.4	7.65	26.9	6.46	6.98	8.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS6	Middle	6.7	2	1	11:38	24.5	7.71	26.8	6.36	7.09	8
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS6	Middle	6.7	2	2	11:38	24.6	7.73	27	6.38	7.11	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS6	Bottom	12.4	3	1	11:38	24.7	7.79	27.1	6.16	7.21	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	CS6	Bottom	12.4	3	2	11:38	24.8	7.8	27.2	6.18	7.24	8.7
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	09:38	24.3	7.64	26.9	6.26	7	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	09:38	24.4	7.65	27	6.28	7.01	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.2	2	1	09:38	24.5	7.71	27.1	6.21	7.1	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.2	2	2	09:38	24.5	7.69	27.2	6.23	7.11	8.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.4	3	1	09:38	24.8	7.8	27	6.02	7.24	8.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS12	Bottom	13.4	3	2	09:38	24.8	7.81	27.3	6.04	7.26	8.9
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	09:58	24.4	7.8	26.8	6.49	6.58	7.7
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	09:58	24.5	7.81	26.9	6.5	6.6	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.9	2	1	09:58	24.6	7.68	27	6.37	6.7	7.8
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.9	2	2	09:58	24.7	7.69	27.2	6.38	6.73	7.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.8	3	1	09:58	24.7	7.71	27.2	6.02	6.87	8.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.8	3	2	09:58	24.8	7.73	27.3	6.01	6.88	7.9
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	09:18	24.4	7.73	27	6.12	7.09	8.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	09:18	24.5	7.74	26.9	6.14	7.11	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS14	Middle	6	2	1	09:18	24.7	7.79	27	6.22	7.24	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS14	Middle	6	2	2	09:18	24.7	7.82	27.1	6.24	7.22	8.1
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS14	Bottom	10.9	3	1	09:18	24.8	7.65	27.3	6.09	7.37	8.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS14	Bottom	10.9	3	2	09:18	24.9	7.63	27.2	6.08	7.4	8.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	10:18	24.4	7.64	26.8	6.42	6.79	7.8
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	10:18	24.5	7.66	27	6.44	6.82	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.7	2	1	10:18	24.6	7.71	27	6.36	7	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.7	2	2	10:18	24.5	7.72	27.1	6.38	7.01	8.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.4	3	1	10:18	24.7	7.83	27.2	6.15	7.12	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.4	3	2	10:18	24.7	7.84	27.3	6.13	7.11	8.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	10:58	24.3	7.62	26.8	6.51	6.78	7.9
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	10:58	24.4	7.63	26.9	6.52	6.8	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	10:58						
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	10:58						
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.9	3	1	10:58	24.5	7.68	27	6.25	6.91	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.9	3	2	10:58	24.5	7.7	27.2	6.29	6.93	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	10:38	24.3	7.7	26.8	6.33	7	8
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	10:38	24.2	7.71	26.9	6.35	7.02	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	10:38						
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	10:38						
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	1	10:38	24.5	7.78	27	6.22	7.14	8.4
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.1	3	2	10:38	24.5	7.79	27.1	6.24	7.17	8.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	11:18	24.5	7.71	26.8	6.57	6.81	7.6
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	11:18	24.5	7.72	26.9	6.59	6.83	7.5
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR10A	Middle	7.6	2	1	11:18	24.5	7.8	27	6.41	7	8.2
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR10A	Middle	7.6	2	2	11:18	24.6	7.79	26.8	6.4	7.01	8.3
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	14.1	3	1	11:18	24.7	7.61	27.1	6.35	7.09	8
TMCLKL	HY/2012/08	2014-11-19	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	14.1	3	2	11:18	24.9	7.63	27.3	6.38	7.1	8.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	1	18:43	24.7	7.97	27.4	6.9	5.88	6.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS4	Surface	1	1	2	18:43	24.7	7.99	27.5	6.94	5.8	6.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS4	Middle	10.8	2	1	18:43	24.8	8	27.7	6.98	6.18	7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS4	Middle	10.8	2	2	18:43	24.8	8.01	27.8	6.96	6.22	7.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS4	Bottom	20.6	3	1	18:43	24.9	8.04	28	7.05	6.01	7.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS4	Bottom	20.6	3	2	18:43	24.8	8.07	28	7.09	5.97	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	2014-11-21	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	1	15:57	24.9	8.01	27.8	6.54	5.4	6.6
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS6	Surface	1	1	2	15:57	24.8	8.02	27.9	6.5	5.46	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS6	Middle	6	2	1	15:57	24.9	8.03	27.9	6.59	5.68	6.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS6	Middle	6	2	2	15:57	24.9	8.05	28	6.61	5.72	7.2
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS6	Bottom	11	3	1	15:57	25	8.05	28	6.46	5.92	7.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	CS6	Bottom	11	3	2	15:57	25	8.07	28.1	6.41	5.98	7.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	1	18:03	24.7	8.01	27.4	6.62	5.8	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS12	Surface	1	1	2	18:03	24.8	8.03	27.4	6.57	5.84	7.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS12	Middle	7.7	2	1	18:03	24.8	8.02	27.6	6.78	6.63	8.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS12	Middle	7.7	2	2	18:03	24.8	8.05	27.7	6.82	6.68	7.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS12	Bottom	14.4	3	1	18:03	24.8	8.03	27.8	7.06	6.89	8
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS12	Bottom	14.4	3	2	18:03	24.9	8.06	27.7	7	6.83	8.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	1	17:43	24.7	8.01	27.7	6.46	6.1	7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS13	Surface	1	1	2	17:43	24.8	8.02	27.6	6.49	6.05	7.2
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS13	Middle	6	2	1	17:43	24.8	8.03	27.7	6.62	6.57	7.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS13	Middle	6	2	2	17:43	24.7	8.05	27.7	6.58	6.53	7.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS13	Bottom	11	3	1	17:43	24.9	8.06	27.8	6.78	6.8	8.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS13	Bottom	11	3	2	17:43	24.9	8.08	27.8	6.76	6.74	8.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	1	18:23	24.7	7.95	27.2	6.2	5.39	6.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS14	Surface	1	1	2	18:23	24.6	7.96	27.3	6.23	5.43	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS14	Middle	8.6	2	1	18:23	24.7	7.98	27.5	6.28	6.75	7.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS14	Middle	8.6	2	2	18:23	24.8	7.99	27.6	6.31	6.71	7.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS14	Bottom	16.2	3	1	18:23	24.8	8	27.8	6.46	6.47	7.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS14	Bottom	16.2	3	2	18:23	24.9	8.01	27.7	6.42	6.51	7.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	1	17:23	24.8	8.02	27.7	6.63	6.28	7.2
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS15	Surface	1	1	2	17:23	24.9	8.04	27.7	6.6	6.32	7.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS15	Middle	5.8	2	1	17:23	24.8	8.02	27.8	6.82	6.68	7.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS15	Middle	5.8	2	2	17:23	24.9	8.03	27.8	6.78	6.62	7.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.6	3	1	17:23	25	8.03	27.8	6.86	6.88	8
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	IS15	Bottom	10.6	3	2	17:23	25	8.04	27.9	6.79	6.93	7.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	1	16:43	24.8	8.04	27.6	6.48	5.49	6.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR8	Surface	1	1	2	16:43	24.7	8.08	27.7	6.46	5.55	6.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR8	Middle		2	1	16:43						
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR8	Middle		2	2	16:43						
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR8	Bottom	4	3	1	16:43	24.8	8.09	27.7	6.42	5.35	6.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR8	Bottom	4	3	2	16:43	24.9	8.1	27.8	6.4	5.42	6.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	1	17:03	24.9	8.03	27.7	6.39	5.17	6
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR9	Surface	1	1	2	17:03	24.8	8.06	27.8	6.43	5.22	6.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR9	Middle		2	1	17:03						
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR9	Middle		2	2	17:03						
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.9	3	1	17:03	24.9	8.05	27.8	6.34	5.29	6.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR9	Bottom	4.9	3	2	17:03	24.9	8.07	27.8	6.32	5.23	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	1	16:23	24.8	7.96	27.7	6.26	5.18	6
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR10A	Surface	1	1	2	16:23	24.8	7.98	27.8	6.22	5.26	6.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR10A	Middle	6.5	2	1	16:23	24.9	7.97	28	6.12	6.22	6.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR10A	Middle	6.5	2	2	16:23	24.9	7.98	28	6.09	6.28	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR10A	Bottom	12	3	1	16:23	24.9	8.01	28.1	5.96	6.6	6.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Flood	Fine	Small Wave	SR10A	Bottom	12	3	2	16:23	25	8.03	28.2	5.99	6.68	7.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	10:21	24.9	8.03	27.5	6.84	5.94	6.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	10:21	24.8	8.04	27.6	6.87	5.85	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.6	2	1	10:21	24.9	8.06	27.8	6.93	6.24	7.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.6	2	2	10:21	24.9	8.07	27.9	6.91	6.29	7.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS4	Bottom	20.2	3	1	10:21	25	8.1	28.1	6.99	6.07	7.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS4	Bottom	20.2	3	2	10:21	25	8.11	28	7.01	6.03	7.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	12:32	25	8.07	27.9	6.47	5.46	6.6
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	12:32	24.9	8.08	28	6.44	5.51	6.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.8	2	1	12:32	25	8.09	28	6.52	5.73	6.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.8	2	2	12:32	25	8.1	28.1	6.55	5.79	6.5

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	2014-11-21	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.6	3	1	12:32	25.1	8.12	28.1	6.4	5.98	7.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.6	3	2	12:32	25.1	8.13	28.2	6.37	6.05	7.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	10:59	24.8	8.07	27.5	6.55	5.84	6.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	10:59	24.9	8.08	27.6	6.5	5.89	6.6
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.5	2	1	10:59	24.9	8.09	27.7	6.71	6.69	7.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.5	2	2	10:59	24.9	8.1	27.8	6.74	6.74	7.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS12	Bottom	14	3	1	10:59	24.9	8.11	27.9	7	6.93	8
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS12	Bottom	14	3	2	10:59	25	8.12	27.9	6.94	6.87	7.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	11:19	24.9	8.07	27.8	6.4	6.18	7.2
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	11:19	24.9	8.08	27.7	6.44	6.11	6.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.8	2	1	11:19	24.9	8.1	27.8	6.56	6.62	7.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.8	2	2	11:19	24.9	8.11	27.8	6.53	6.69	7.6
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.6	3	1	11:19	25	8.12	27.9	6.74	6.85	8.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.6	3	2	11:19	25	8.13	27.9	6.7	6.8	7.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	10:41	24.8	8.01	27.3	6.14	5.44	6.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	10:41	24.8	8.02	27.4	6.17	5.49	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS14	Middle	8.4	2	1	10:41	24.8	8.04	27.6	6.22	6.81	7.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS14	Middle	8.4	2	2	10:41	24.9	8.04	27.7	6.25	6.75	7.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS14	Bottom	15.8	3	1	10:41	24.9	8.05	27.9	6.4	6.52	7.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS14	Bottom	15.8	3	2	10:41	25	8.06	27.9	6.37	6.58	7.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	11:39	24.9	8.09	27.8	6.57	6.34	6.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	11:39	25	8.1	27.8	6.54	6.39	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.6	2	1	11:39	24.9	8.08	27.9	6.76	6.72	7.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.6	2	2	11:39	25	8.08	27.8	6.72	6.67	7.6
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.2	3	1	11:39	25	8.09	27.9	6.81	6.94	8.2
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.2	3	2	11:39	25	8.1	27.9	6.83	6.99	7.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	12:14	24.9	8.13	27.7	6.42	5.54	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	12:14	24.9	8.14	27.8	6.4	5.6	6.5
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	12:14						
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	12:14						
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.6	3	1	12:14	24.9	8.15	27.8	6.36	5.41	6.8
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR8	Bottom	3.6	3	2	12:14	25	8.16	27.9	6.33	5.47	6.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	12:00	25	8.11	27.8	6.33	5.23	6.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	12:00	24.9	8.12	27.9	6.35	5.29	6.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	12:00						
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	12:00						
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.6	3	1	12:00	25	8.12	27.9	6.29	5.34	6.6
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.6	3	2	12:00	25	8.13	27.9	6.26	5.38	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	12:59	24.9	8.02	27.8	6.21	5.24	6.1
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	12:59	25	8.03	27.9	6.17	5.32	6.3
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR10A	Middle	6.3	2	1	12:59	25	8.02	28.1	6.06	6.27	6.4
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR10A	Middle	6.3	2	2	12:59	25	8.02	28.1	6.03	6.35	6.7
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	11.6	3	1	12:59	25	8.07	28.2	5.91	6.65	6.9
TMCLKL	HY/2012/08	2014-11-21	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	11.6	3	2	12:59	25.1	8.08	28.3	5.93	6.73	7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS4	Surface	1	1	1	10:13	24.4	8.11	27.8	6.87	5.76	6.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS4	Surface	1	1	2	10:13	24.5	8.12	27.8	6.84	5.7	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS4	Middle	10.7	2	1	10:13	24.5	8.13	27.9	6.8	5.69	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS4	Middle	10.7	2	2	10:13	24.5	8.14	27.9	6.77	5.65	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS4	Bottom	20.4	3	1	10:13	24.5	8.1	28	6.69	6.05	7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS4	Bottom	20.4	3	2	10:13	24.6	8.11	28.1	6.65	6.12	7.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS6	Surface	1	1	1	07:56	24	8.1	27.9	6.72	5.18	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS6	Surface	1	1	2	07:56	24.1	8.09	28	6.75	5.25	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS6	Middle	6	2	1	07:56	24.1	8.11	28	6.78	5.09	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS6	Middle	6	2	2	07:56	24.2	8.12	28.1	6.76	5.13	6.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS6	Bottom	11	3	1	07:56	24.2	8.13	28.2	6.7	5.76	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	CS6	Bottom	11	3	2	07:56	24.3	8.14	28.2	6.68	5.7	7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS12	Surface	1	1	1	09:43	24.3	8.04	27.8	6.8	5.63	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS12	Surface	1	1	2	09:43	24.4	8.05	27.8	6.76	5.69	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	2014-11-24	Mid-Flood	Fine	Calm	IS12	Middle	7.7	2	1	09:43	24.4	8.07	27.9	6.83	5.55	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS12	Middle	7.7	2	2	09:43	24.4	8.08	27.9	6.85	5.5	7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS12	Bottom	14.4	3	1	09:43	24.5	8.09	28	6.7	5.88	7.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS12	Bottom	14.4	3	2	09:43	24.5	8.1	28.1	6.68	5.81	7.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS13	Surface	1	1	1	09:24	24.2	8.12	27.9	6.73	5.48	6.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS13	Surface	1	1	2	09:24	24.3	8.13	28	6.7	5.54	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS13	Middle	6	2	1	09:24	24.3	8.1	28	6.83	5.4	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS13	Middle	6	2	2	09:24	24.3	8.11	28	6.86	5.35	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS13	Bottom	11	3	1	09:24	24.3	8.13	28.1	6.67	5.69	7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS13	Bottom	11	3	2	09:24	24.4	8.14	28.2	6.63	5.74	7.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS14	Surface	1	1	1	09:58	24.4	8.07	27.7	6.64	5.54	6.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS14	Surface	1	1	2	09:58	24.4	8.08	27.8	6.6	5.49	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS14	Middle	8.5	2	1	09:58	24.4	8.08	27.9	6.71	5.62	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS14	Middle	8.5	2	2	09:58	24.5	8.09	27.9	6.73	5.67	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS14	Bottom	16	3	1	09:58	24.5	8.11	28	6.58	5.93	7.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS14	Bottom	16	3	2	09:58	24.5	8.12	28.1	6.55	6	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS15	Surface	1	1	1	09:03	24.2	8.1	27.9	6.74	5.62	7.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS15	Surface	1	1	2	09:03	24.2	8.11	27.9	6.77	5.57	7.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS15	Middle	5.9	2	1	09:03	24.2	8.1	27.9	6.8	5.43	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS15	Middle	5.9	2	2	09:03	24.3	8.09	28	6.81	5.38	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS15	Bottom	10.8	3	1	09:03	24.3	8.1	28.1	6.72	5.76	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	IS15	Bottom	10.8	3	2	09:03	24.4	8.11	28.2	6.69	5.81	7.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR8	Surface	1	1	1	08:35	24	8.08	27.8	6.7	5.32	6.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR8	Surface	1	1	2	08:35	24.1	8.09	27.8	6.66	5.38	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR8	Middle		2	1	08:35						
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR8	Middle		2	2	08:35						
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR8	Bottom	4.4	3	1	08:35	24.2	8.1	27.9	6.5	5.55	6.6
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR8	Bottom	4.4	3	2	08:35	24.2	8.11	27.9	6.46	5.6	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR9	Surface	1	1	1	08:47	24.1	8.09	27.8	6.83	5.09	5.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR9	Surface	1	1	2	08:47	24.2	8.1	27.9	6.8	5.15	5.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR9	Middle		2	1	08:47						
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR9	Middle		2	2	08:47						
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR9	Bottom	4.8	3	1	08:47	24.2	8.11	27.9	6.59	5.34	6.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR9	Bottom	4.8	3	2	08:47	24.2	8.12	28	6.61	5.4	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR10A	Surface	1	1	1	08:15	24	8.02	27.6	6.67	5.09	6.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR10A	Surface	1	1	2	08:15	23.9	8.03	27.7	6.65	5.12	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR10A	Middle	6.4	2	1	08:15	24	8.05	27.7	6.7	5.19	6.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR10A	Middle	6.4	2	2	08:15	24.1	8.06	27.8	6.73	5.24	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR10A	Bottom	11.8	3	1	08:15	24.3	8.07	28	6.6	5.83	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Flood	Fine	Calm	SR10A	Bottom	11.8	3	2	08:15	24.3	8.08	28.1	6.57	5.89	7.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS4	Surface	1	1	1	12:25	24.6	8.17	27.9	6.82	5.81	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS4	Surface	1	1	2	12:25	24.6	8.19	28	6.78	5.77	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS4	Middle	10.5	2	1	12:25	24.6	8.17	28.1	6.75	5.74	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS4	Middle	10.5	2	2	12:25	24.7	8.2	28	6.72	5.71	7.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS4	Bottom	20	3	1	12:25	24.7	8.15	28.1	6.62	6.12	7.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS4	Bottom	20	3	2	12:25	24.8	8.17	28.2	6.6	6.18	7.6
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS6	Surface	1	1	1	15:11	24.1	8.16	28	6.66	5.25	6.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS6	Surface	1	1	2	15:11	24.2	8.14	28.2	6.7	5.3	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS6	Middle	5.8	2	1	15:11	24.2	8.18	28.2	6.72	5.14	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS6	Middle	5.8	2	2	15:11	24.4	8.2	28.2	6.71	5.18	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS6	Bottom	10.6	3	1	15:11	24.3	8.18	28.3	6.65	5.8	7.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	CS6	Bottom	10.6	3	2	15:11	24.4	8.21	28.4	6.62	5.76	7.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS12	Surface	1	1	1	13:11	24.4	8.09	27.9	6.75	5.69	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS12	Surface	1	1	2	13:11	24.5	8.1	27.9	6.71	5.74	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS12	Middle	7.5	2	1	13:11	24.6	8.13	28	6.77	5.6	6.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS12	Middle	7.5	2	2	13:11	24.6	8.14	28	6.79	5.56	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS12	Bottom	14	3	1	13:11	24.6	8.14	28.1	6.64	5.94	7.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS12	Bottom	14	3	2	13:11	24.7	8.16	28.2	6.62	5.87	7.3

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	2014-11-24	Mid-Ebb	Fine	Calm	IS13	Surface	1	1	1	13:31	24.3	8.17	28	6.68	5.53	6.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS13	Surface	1	1	2	13:31	24.4	8.18	28.1	6.64	5.59	6.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS13	Middle	5.8	2	1	13:31	24.4	8.15	28.1	6.78	5.46	6.6
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS13	Middle	5.8	2	2	13:31	24.5	8.17	28.2	6.8	5.41	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS13	Bottom	10.6	3	1	13:31	24.4	8.18	28.2	6.62	5.74	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS13	Bottom	10.6	3	2	13:31	24.6	8.21	28.3	6.58	5.8	7
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS14	Surface	1	1	1	12:51	24.5	8.13	27.9	6.58	5.6	6.6
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS14	Surface	1	1	2	12:51	24.5	8.15	27.9	6.55	5.55	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS14	Middle	8.3	2	1	12:51	24.6	8.14	28	6.66	5.69	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS14	Middle	8.3	2	2	12:51	24.6	8.15	28	6.68	5.72	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS14	Bottom	15.6	3	1	12:51	24.6	8.16	28.1	6.52	5.99	7.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS14	Bottom	15.6	3	2	12:51	24.7	8.18	28.2	6.49	6.05	7.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS15	Surface	1	1	1	13:51	24.3	8.16	28	6.69	5.68	6.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS15	Surface	1	1	2	13:51	24.4	8.19	28	6.71	5.62	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS15	Middle	5.7	2	1	13:51	24.4	8.15	28	6.74	5.49	6.6
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS15	Middle	5.7	2	2	13:51	24.5	8.13	28.1	6.76	5.43	6.4
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS15	Bottom	10.4	3	1	13:51	24.4	8.15	28.2	6.67	5.82	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	IS15	Bottom	10.4	3	2	13:51	24.6	8.16	28.3	6.63	5.86	7.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR8	Surface	1	1	1	14:31	24.2	8.13	27.9	6.65	5.39	6.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR8	Surface	1	1	2	14:31	24.2	8.16	28	6.61	5.42	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR8	Middle		2	1	14:31						
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR8	Middle		2	2	14:31						
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR8	Bottom	4	3	1	14:31	24.3	8.15	28	6.45	5.61	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR8	Bottom	4	3	2	14:31	24.4	8.17	28.1	6.41	5.64	7.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR9	Surface	1	1	1	14:11	24.2	8.15	27.9	6.78	5.14	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR9	Surface	1	1	2	14:11	24.3	8.17	28	6.74	5.2	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR9	Middle		2	1	14:11						
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR9	Middle		2	2	14:11						
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR9	Bottom	4.4	3	1	14:11	24.3	8.16	28	6.52	5.39	6.7
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR9	Bottom	4.4	3	2	14:11	24.4	8.19	28.1	6.56	5.44	6.9
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR10A	Surface	1	1	1	14:51	24.1	8.06	27.7	6.62	5.15	6.1
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR10A	Surface	1	1	2	14:51	24	8.09	27.9	6.6	5.19	6.3
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR10A	Middle	6.2	2	1	14:51	24.1	8.1	27.8	6.65	5.24	6.2
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR10A	Middle	6.2	2	2	14:51	24.2	8.12	27.9	6.69	5.3	6.5
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR10A	Bottom	11.4	3	1	14:51	24.4	8.12	28.1	6.56	5.88	6.8
TMCLKL	HY/2012/08	2014-11-24	Mid-Ebb	Fine	Calm	SR10A	Bottom	11.4	3	2	14:51	24.4	8.14	28.2	6.52	5.93	7.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS4	Surface	1	1	1	11:30	24.4	8.13	27.9	6.83	5.72	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS4	Surface	1	1	2	11:30	24.4	8.14	28	6.78	5.65	6.6
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS4	Middle	10.6	2	1	11:30	24.4	8.16	28	6.68	5.87	7.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS4	Middle	10.6	2	2	11:30	24.5	8.17	28.1	6.71	5.94	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS4	Bottom	20.2	3	1	11:30	24.5	8.12	28.2	6.53	6.02	7.3
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS4	Bottom	20.2	3	2	11:30	24.5	8.13	28.3	6.48	6.09	7.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS6	Surface	1	1	1	08:35	24.2	8.12	27.8	6.86	5.43	6.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS6	Surface	1	1	2	08:35	24.3	8.13	27.9	6.83	5.37	6.3
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS6	Middle	6.1	2	1	08:35	24.3	8.1	27.9	6.88	5.28	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS6	Middle	6.1	2	2	08:35	24.3	8.11	27.9	6.9	5.33	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS6	Bottom	11.2	3	1	08:35	24.3	8.14	28	6.75	5.96	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	CS6	Bottom	11.2	3	2	08:35	24.4	8.15	28.1	6.72	6.03	6.6
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS12	Surface	1	1	1	10:42	24.3	8.14	28	6.78	5.73	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS12	Surface	1	1	2	10:42	24.3	8.15	28	6.75	5.68	6.3
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS12	Middle	7.7	2	1	10:42	24.3	8.1	28	6.82	5.91	7.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS12	Middle	7.7	2	2	10:42	24.4	8.11	28.1	6.8	5.95	7.3
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS12	Bottom	14.4	3	1	10:42	24.4	8.13	28.1	6.63	6.13	7.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS12	Bottom	14.4	3	2	10:42	24.5	8.14	28.2	6.61	6.19	7.6
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS13	Surface	1	1	1	10:20	24.3	8.04	27.9	6.69	5.67	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS13	Surface	1	1	2	10:20	24.4	8.05	28	6.73	5.74	6.3
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS13	Middle	6.1	2	1	10:20	24.4	8.07	28	6.7	5.94	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS13	Middle	6.1	2	2	10:20	24.4	8.08	28	6.67	5.9	6.6

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	2014-11-26	Mid-Flood	Fine	Calm	IS13	Bottom	11.2	3	1	10:20	24.4	8.09	28.2	6.43	6.08	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS13	Bottom	11.2	3	2	10:20	24.5	8.1	28.2	6.47	6.13	7.3
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS14	Surface	1	1	1	11:05	24.3	8.11	27.8	6.73	5.61	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS14	Surface	1	1	2	11:05	24.4	8.12	27.9	6.7	5.66	6.6
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS14	Middle	8.4	2	1	11:05	24.4	8.14	28	6.77	5.82	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS14	Middle	8.4	2	2	11:05	24.4	8.15	28.1	6.79	5.88	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS14	Bottom	15.8	3	1	11:05	24.4	8.16	28.2	6.64	5.97	6.9
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS14	Bottom	15.8	3	2	11:05	24.4	8.17	28.2	6.59	6.04	7.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS15	Surface	1	1	1	10:01	24.4	8.07	28	6.84	5.56	6.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS15	Surface	1	1	2	10:01	24.4	8.08	28	6.8	5.61	6.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS15	Middle	6	2	1	10:01	24.3	8.09	28	6.78	5.8	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS15	Middle	6	2	2	10:01	24.4	8.1	28	6.76	5.86	6.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS15	Bottom	11	3	1	10:01	24.4	8.11	28.1	6.54	5.93	7.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	IS15	Bottom	11	3	2	10:01	24.5	8.12	28.2	6.51	5.99	7.3
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR8	Surface	1	1	1	09:29	24.2	8.1	27.8	6.74	5.49	6.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR8	Surface	1	1	2	09:29	24.3	8.11	27.9	6.72	5.53	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR8	Middle		2	1	09:29						
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR8	Middle		2	2	09:29						
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR8	Bottom	4.8	3	1	09:29	24.3	8.13	28	6.66	5.67	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR8	Bottom	4.8	3	2	09:29	24.3	8.14	27.9	6.63	5.74	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR9	Surface	1	1	1	09:45	24.2	8.11	27.9	6.77	5.33	6.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR9	Surface	1	1	2	09:45	24.3	8.12	28	6.74	5.39	6.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR9	Middle		2	1	09:45						
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR9	Middle		2	2	09:45						
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR9	Bottom	4.6	3	1	09:45	24.3	8.13	28	6.64	5.58	6.6
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR9	Bottom	4.6	3	2	09:45	24.3	8.14	28.1	6.6	5.66	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR10A	Surface	1	1	1	09:02	24.2	8.08	27.7	6.81	5.32	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR10A	Surface	1	1	2	09:02	24.2	8.09	27.8	6.77	5.38	6.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR10A	Middle	6.3	2	1	09:02	24.2	8.1	27.8	6.85	5.21	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR10A	Middle	6.3	2	2	09:02	24.3	8.1	27.8	6.83	5.25	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR10A	Bottom	11.6	3	1	09:02	24.3	8.1	27.9	6.73	5.9	7.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Flood	Fine	Calm	SR10A	Bottom	11.6	3	2	09:02	24.3	8.11	28	6.69	5.84	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	1	13:59	24.5	8.19	28	6.77	5.76	6.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS4	Surface	1	1	2	13:59	24.5	8.2	28.1	6.72	5.7	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.4	2	1	13:59	24.5	8.21	28.2	6.62	5.94	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS4	Middle	10.4	2	2	13:59	24.6	8.23	28.2	6.65	5.99	7.3
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS4	Bottom	19.8	3	1	13:59	24.6	8.19	28.3	6.48	6.09	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS4	Bottom	19.8	3	2	13:59	24.7	8.2	28.4	6.42	6.14	7.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	1	16:45	24.3	8.17	27.9	6.8	5.49	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS6	Surface	1	1	2	16:45	24.4	8.19	28	6.77	5.44	6.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.9	2	1	16:45	24.4	8.16	28	6.81	5.34	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS6	Middle	5.9	2	2	16:45	24.5	8.17	28.1	6.83	5.39	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.8	3	1	16:45	24.4	8.2	28.2	6.69	6.03	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	CS6	Bottom	10.8	3	2	16:45	24.5	8.23	28.2	6.65	6.09	7.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	1	14:45	24.4	8.21	28.1	6.72	5.8	6.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS12	Surface	1	1	2	14:45	24.4	8.22	28.1	6.69	5.74	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.5	2	1	14:45	24.4	8.15	28.1	6.76	5.98	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS12	Middle	7.5	2	2	14:45	24.5	8.16	28.2	6.75	6	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS12	Bottom	14	3	1	14:45	24.6	8.2	28.2	6.58	6.2	7.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS12	Bottom	14	3	2	14:45	24.6	8.22	28.3	6.55	6.25	7.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	1	15:05	24.4	8.1	28	6.62	5.72	6.6
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS13	Surface	1	1	2	15:05	24.5	8.12	28.1	6.68	5.79	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.9	2	1	15:05	24.5	8.13	28.1	6.65	6	7.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS13	Middle	5.9	2	2	15:05	24.6	8.14	28.2	6.62	5.96	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.8	3	1	15:05	24.6	8.15	28.3	6.38	6.14	7.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS13	Bottom	10.8	3	2	15:05	24.7	8.17	28.3	6.41	6.19	7.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	1	14:25	24.4	8.15	27.9	6.67	5.68	6.6
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS14	Surface	1	1	2	14:25	24.5	8.17	28	6.64	5.72	6.5

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	2014-11-26	Mid-Ebb	Fine	Small Wave	IS14	Middle	8.2	2	1	14:25	24.5	8.2	28.1	6.71	5.87	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS14	Middle	8.2	2	2	14:25	24.6	8.21	28.1	6.74	5.93	7.1
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS14	Bottom	15.4	3	1	14:25	24.6	8.23	28.2	6.59	6.03	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS14	Bottom	15.4	3	2	14:25	24.6	8.25	28.3	6.54	6.1	7.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	1	15:25	24.5	8.14	28.1	6.78	5.62	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS15	Surface	1	1	2	15:25	24.5	8.16	28.1	6.75	5.68	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.8	2	1	15:25	24.4	8.14	28.1	6.72	5.85	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS15	Middle	5.8	2	2	15:25	24.5	8.17	28.2	6.7	5.92	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.6	3	1	15:25	24.5	8.18	28.3	6.49	5.98	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	IS15	Bottom	10.6	3	2	15:25	24.6	8.19	28.3	6.45	6.04	7.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	1	16:05	24.4	8.16	27.9	6.68	5.55	6.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR8	Surface	1	1	2	16:05	24.4	8.18	27.9	6.66	5.58	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	1	16:05						
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR8	Middle		2	2	16:05						
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.4	3	1	16:05	24.4	8.19	28.1	6.59	5.74	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR8	Bottom	4.4	3	2	16:05	24.5	8.21	28	6.56	5.8	6.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	1	15:45	24.3	8.16	28	6.71	5.39	6.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR9	Surface	1	1	2	15:45	24.4	8.18	28.1	6.68	5.44	6.5
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	1	15:45						
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR9	Middle		2	2	15:45						
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.2	3	1	15:45	24.4	8.19	28.1	6.58	5.63	6.8
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR9	Bottom	4.2	3	2	15:45	24.5	8.2	28.2	6.54	5.7	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	1	16:25	24.3	8.14	27.5	6.75	5.38	6.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR10A	Surface	1	1	2	16:25	24.3	8.15	27.9	6.71	5.44	6.7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR10A	Middle	6.1	2	1	16:25	24.3	8.16	27.9	6.79	5.28	6.2
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR10A	Middle	6.1	2	2	16:25	24.4	8.17	28	6.77	5.32	6.4
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	11.2	3	1	16:25	24.4	8.15	28	6.67	5.97	7
TMCLKL	HY/2012/08	2014-11-26	Mid-Ebb	Fine	Small Wave	SR10A	Bottom	11.2	3	2	16:25	24.5	8.17	28.1	6.62	5.9	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	1	13:40	24.5	8.14	27.9	6.74	5.86	6.9
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS4	Surface	1	1	2	13:40	24.6	8.15	28	6.7	5.89	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.7	2	1	13:40	24.6	8.12	28	6.79	5.96	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS4	Middle	10.7	2	2	13:40	24.6	8.13	28.1	6.82	6.03	7
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	20.4	3	1	13:40	24.6	8.09	28.2	6.63	6.43	7.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS4	Bottom	20.4	3	2	13:40	24.7	8.1	28.3	6.6	6.37	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	1	10:26	24.5	8.08	27.6	6.64	5.92	7.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS6	Surface	1	1	2	10:26	24.6	8.09	27.7	6.61	5.98	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.3	2	1	10:26	24.4	8.11	27.7	6.73	5.64	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS6	Middle	6.3	2	2	10:26	24.5	8.12	27.8	6.75	5.68	6.4
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	11.6	3	1	10:26	24.5	8.1	27.9	6.79	6.24	7.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	CS6	Bottom	11.6	3	2	10:26	24.5	8.11	27.9	6.81	6.2	7.9
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	1	12:54	24.4	8.14	27.9	6.83	5.72	7
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS12	Surface	1	1	2	12:54	24.4	8.15	27.9	6.81	5.77	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.8	2	1	12:54	24.4	8.13	27.9	6.86	5.84	7.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS12	Middle	7.8	2	2	12:54	24.5	8.14	28	6.87	5.88	7.6
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.6	3	1	12:54	24.5	8.14	28.1	6.74	5.96	8.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS12	Bottom	14.6	3	2	12:54	24.5	8.15	28.1	6.71	6.03	8.4
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	1	12:34	24.4	8.09	27.8	6.71	5.91	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS13	Surface	1	1	2	12:34	24.4	8.1	27.8	6.68	5.97	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	1	12:34	24.4	8.1	27.8	6.73	5.78	7.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS13	Middle	6.2	2	2	12:34	24.5	8.11	27.8	6.76	5.83	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	1	12:34	24.5	8.12	27.9	6.67	6.14	8.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS13	Bottom	11.4	3	2	12:34	24.6	8.13	28	6.69	6.1	8.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	1	13:16	24.4	8.11	27.9	6.75	5.76	6.9
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS14	Surface	1	1	2	13:16	24.5	8.12	27.8	6.72	5.81	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.3	2	1	13:16	24.5	8.14	28	6.83	5.93	7.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS14	Middle	8.3	2	2	13:16	24.5	8.14	28	6.79	5.99	7.6
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.6	3	1	13:16	24.5	8.14	28.1	6.68	6.06	8.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS14	Bottom	15.6	3	2	13:16	24.6	8.15	28.2	6.65	6.1	7.9

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	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	1	12:15	24.5	8.12	27.7	6.7	5.87	7
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS15	Surface	1	1	2	12:15	24.5	8.13	27.8	6.73	5.93	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.1	2	1	12:15	24.5	8.11	27.8	6.77	5.76	6.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS15	Middle	6.1	2	2	12:15	24.5	8.12	27.8	6.79	5.79	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.2	3	1	12:15	24.6	8.13	27.9	6.85	6.01	7.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	IS15	Bottom	11.2	3	2	12:15	24.6	8.14	28	6.82	6.07	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	1	11:45	24.5	8.12	27.7	6.58	5.88	6.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR8	Surface	1	1	2	11:45	24.6	8.13	27.8	6.55	5.93	6.9
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	1	11:45						
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR8	Middle		2	2	11:45						
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	1	11:45	24.6	8.14	27.9	6.63	5.8	7.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR8	Bottom	4.8	3	2	11:45	24.6	8.14	27.9	6.66	5.76	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	1	12:00	24.4	8.14	27.6	6.61	5.91	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR9	Surface	1	1	2	12:00	24.5	8.15	27.7	6.63	5.96	6.9
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	1	12:00						
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR9	Middle		2	2	12:00						
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.8	3	1	12:00	24.5	8.12	27.8	6.68	5.73	6.9
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR9	Bottom	4.8	3	2	12:00	24.6	8.13	27.9	6.7	5.7	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	1	11:15	24.5	8.09	27.7	6.73	6.04	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR10A	Surface	1	1	2	11:15	24.5	8.08	27.7	6.69	5.97	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.4	2	1	11:15	24.5	8.09	27.8	6.8	5.72	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR10A	Middle	6.4	2	2	11:15	24.6	8.1	27.8	6.78	5.69	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	11.8	3	1	11:15	24.6	8.11	27.8	6.83	5.91	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Flood	Cloudy	Small Wave	SR10A	Bottom	11.8	3	2	11:15	24.6	8.1	27.9	6.86	5.79	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	1	16:08	24.3	8.14	28.2	6.59	5.92	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS4	Surface	1	1	2	16:08	24.4	8.14	28.1	6.66	5.93	6.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.6	2	1	16:08	24.5	8.11	28.2	6.68	5.99	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS4	Middle	10.6	2	2	16:08	24.4	8.12	28.3	6.72	6.05	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	20.2	3	1	16:08	24.4	8.08	28.4	6.46	6.41	7.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS4	Bottom	20.2	3	2	16:08	24.5	8.07	28.3	6.47	6.42	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	1	18:41	24.3	8.07	27.7	6.57	5.97	7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS6	Surface	1	1	2	18:41	24.3	8.08	27.8	6.58	5.94	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.2	2	1	18:41	24.3	8.08	27.8	6.65	5.69	7.4
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS6	Middle	6.2	2	2	18:41	24.4	8.09	27.8	6.68	5.7	7.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	11.4	3	1	18:41	24.4	8.09	27.9	6.72	6.29	7.6
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	CS6	Bottom	11.4	3	2	18:41	24.4	8.09	27.8	6.77	6.31	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	1	16:46	24.3	8.14	28	6.75	5.73	6.6
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS12	Surface	1	1	2	16:46	24.4	8.13	27.9	6.77	5.76	6.4
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.8	2	1	16:46	24.4	8.13	28.1	6.69	5.9	7.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS12	Middle	7.8	2	2	16:46	24.5	8.13	28	6.75	5.92	7.4
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14.5	3	1	16:46	24.5	8.13	28.2	6.58	5.99	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS12	Bottom	14.5	3	2	16:46	24.5	8.14	28.1	6.64	6.06	7.6
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	1	17:02	24.3	8.07	27.9	6.65	5.95	7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS13	Surface	1	1	2	17:02	24.4	8.08	27.9	6.6	5.98	7.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6.2	2	1	17:02	24.4	8.08	27.9	6.61	5.84	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS13	Middle	6.2	2	2	17:02	24.4	8.09	27.8	6.63	5.82	6.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11.3	3	1	17:02	24.5	8.1	27.9	6.66	6.14	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS13	Bottom	11.3	3	2	17:02	24.4	8.11	27.9	6.62	6.13	7.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	1	16:28	24.3	8.1	27.9	6.6	5.88	6.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS14	Surface	1	1	2	16:28	24.3	8.09	27.9	6.64	5.89	6.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.2	2	1	16:28	24.3	8.11	28.1	6.71	6	7.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS14	Middle	8.2	2	2	16:28	24.4	8.11	28.2	6.67	6.03	7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.4	3	1	16:28	24.4	8.12	28.2	6.48	6.21	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS14	Bottom	15.4	3	2	16:28	24.4	8.11	28.2	6.45	6.15	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	1	17:16	24.3	8.11	27.8	6.65	5.91	6.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS15	Surface	1	1	2	17:16	24.3	8.1	27.7	6.67	5.9	6.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	1	17:16	24.4	8.11	27.8	6.69	5.78	6.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS15	Middle	6	2	2	17:16	24.5	8.11	27.9	6.72	5.8	6.9

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	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	1	17:16	24.5	8.12	27.9	6.77	6.04	7.4
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	IS15	Bottom	11	3	2	17:16	24.5	8.13	28	6.81	6.06	7.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	1	17:44	24.4	8.11	27.8	6.58	5.91	6.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR8	Surface	1	1	2	17:44	24.3	8.1	27.7	6.53	5.93	7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	1	17:44						
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR8	Middle		2	2	17:44						
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.6	3	1	17:44	24.5	8.13	27.9	6.6	5.85	6.9
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR8	Bottom	4.6	3	2	17:44	24.4	8.12	27.8	6.61	5.8	6.7
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	1	17:27	24.3	8.13	27.8	6.58	5.95	7.2
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR9	Surface	1	1	2	17:27	24.4	8.12	27.7	6.57	5.98	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	1	17:27						
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR9	Middle		2	2	17:27						
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.5	3	1	17:27	24.4	8.11	27.9	6.62	5.7	6.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR9	Bottom	4.5	3	2	17:27	24.5	8.1	28	6.66	5.68	6.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	1	18:02	24.4	8.08	27.8	6.62	6.1	7.1
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR10A	Surface	1	1	2	18:02	24.4	8.07	27.8	6.66	6.04	7.3
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.3	2	1	18:02	24.4	8.09	27.9	6.75	5.7	7.6
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR10A	Middle	6.3	2	2	18:02	24.5	8.08	27.8	6.77	5.66	7.5
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	11.6	3	1	18:02	24.5	8.1	27.9	6.78	5.85	7.8
TMCLKL	HY/2012/08	2014-11-28	Mid-Ebb	Cloudy	Small Wave	SR10A	Bottom	11.6	3	2	18:02	24.5	8.1	28	6.81	5.88	7.5

Appendix J

Impact Dolphin Monitoring Survey

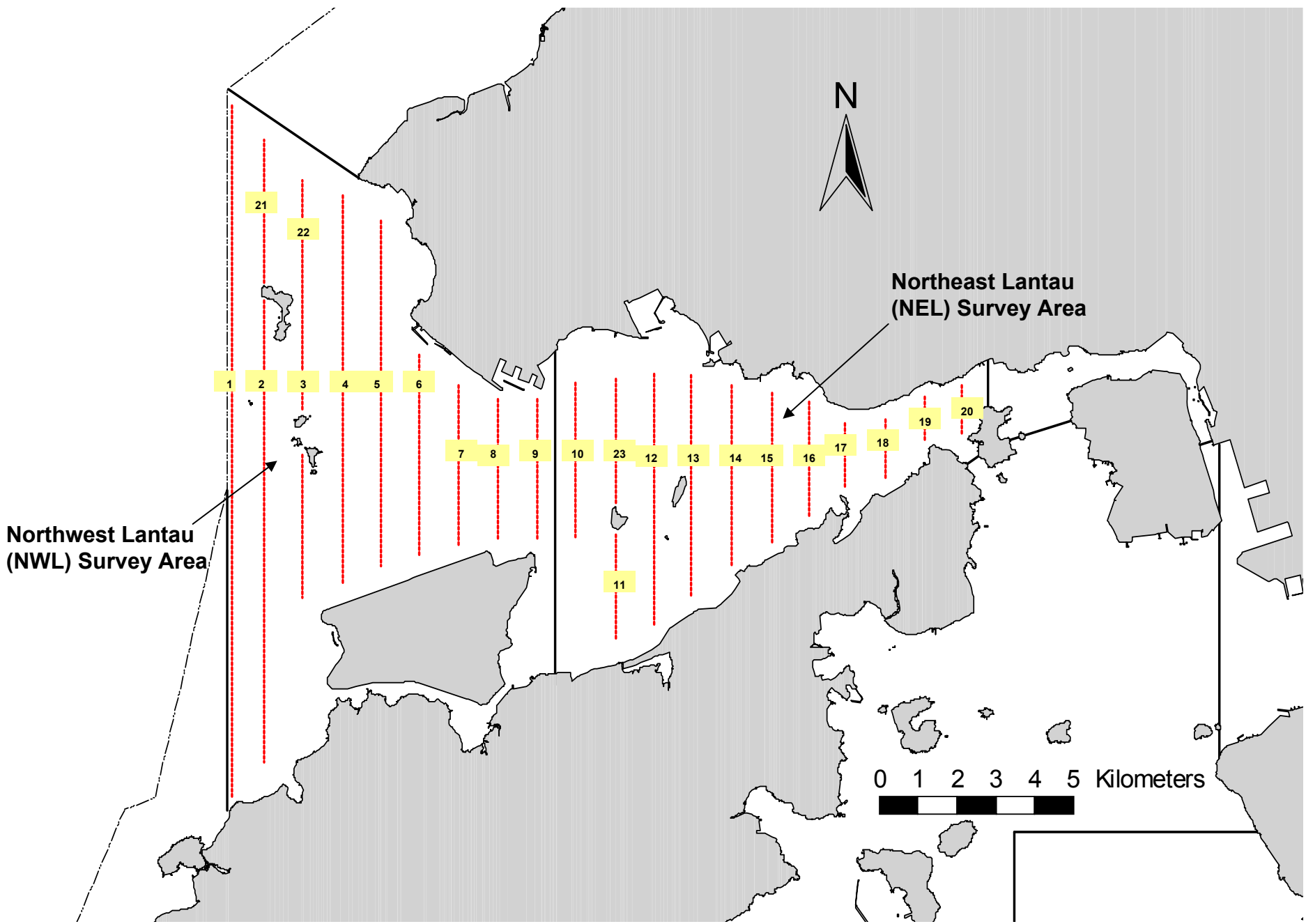


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

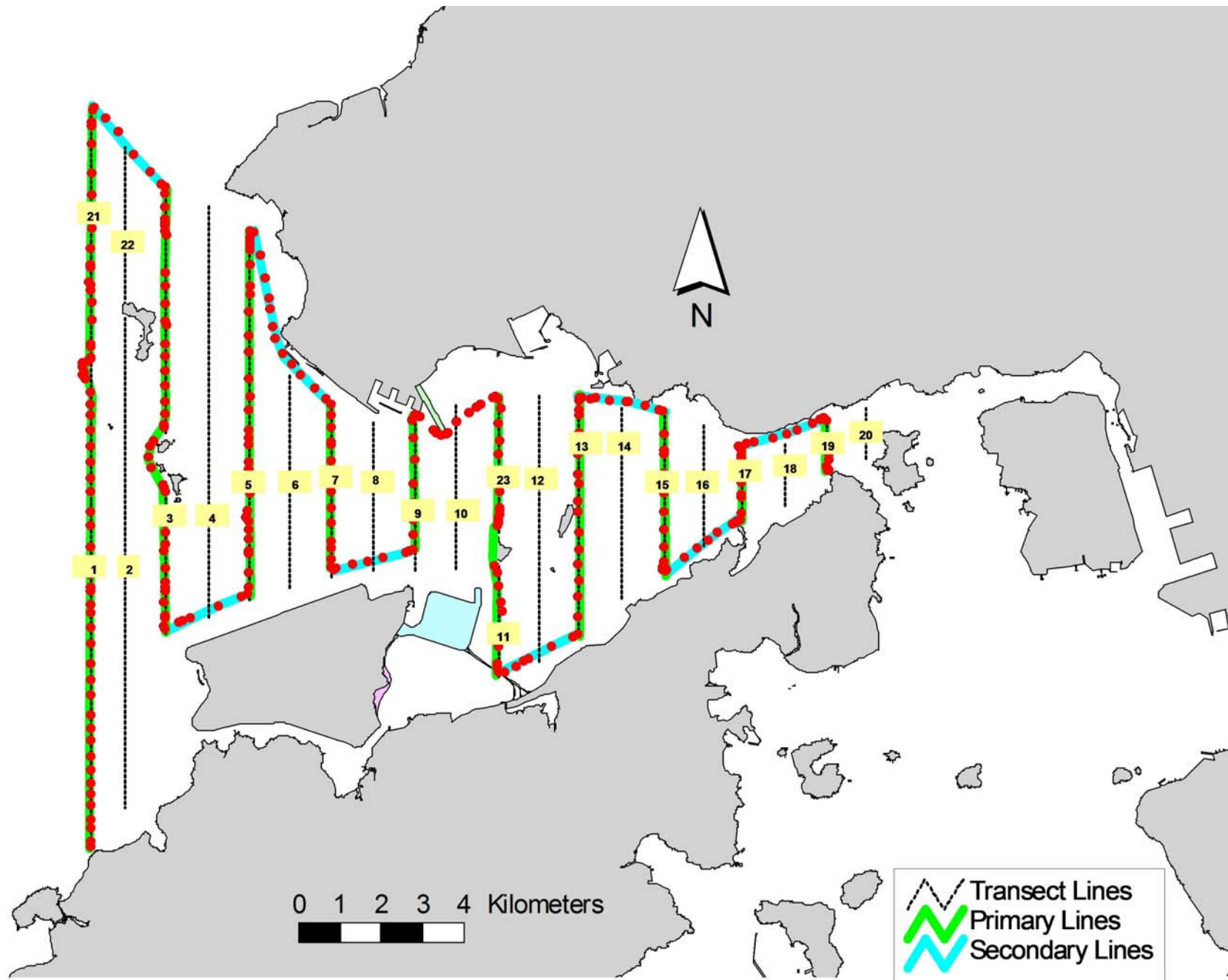


Figure 2. Survey Route on November 4th, 2014 (from HKLR03 project)

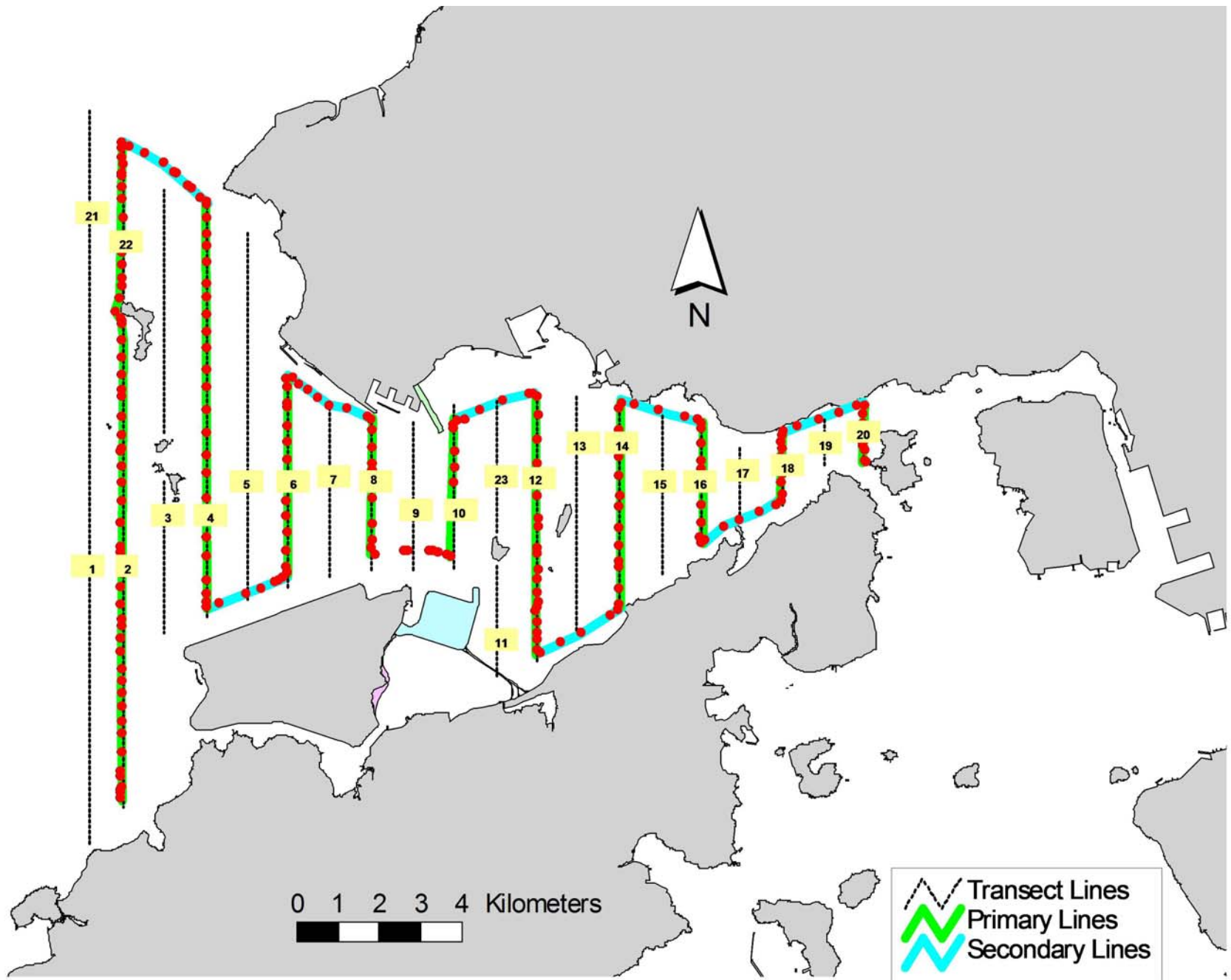


Figure 3. Survey Route on November 10th, 2014 (from HKLR03 project)

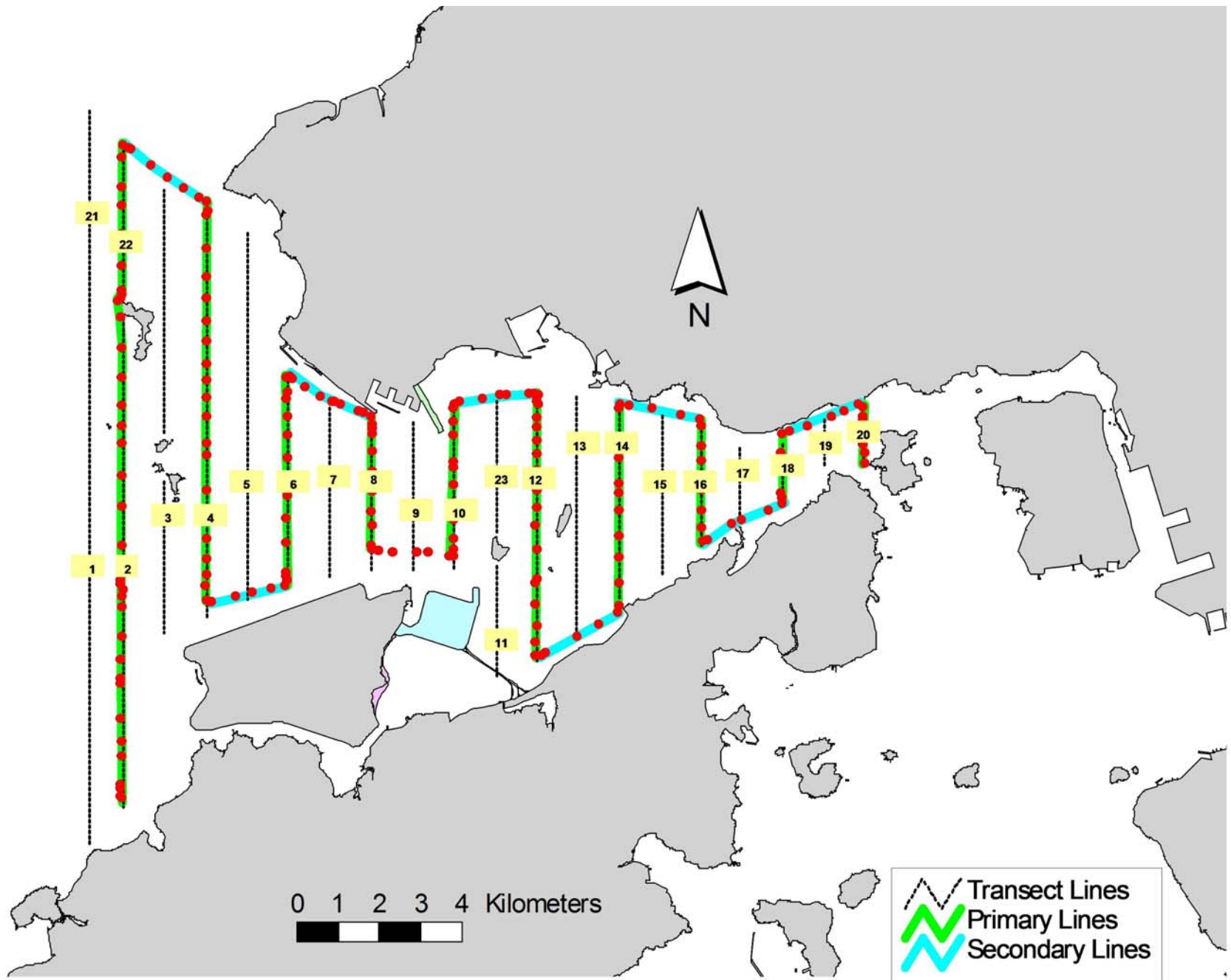


Figure 4. Survey Route on November 12th, 2014 (from HKLR03 project)

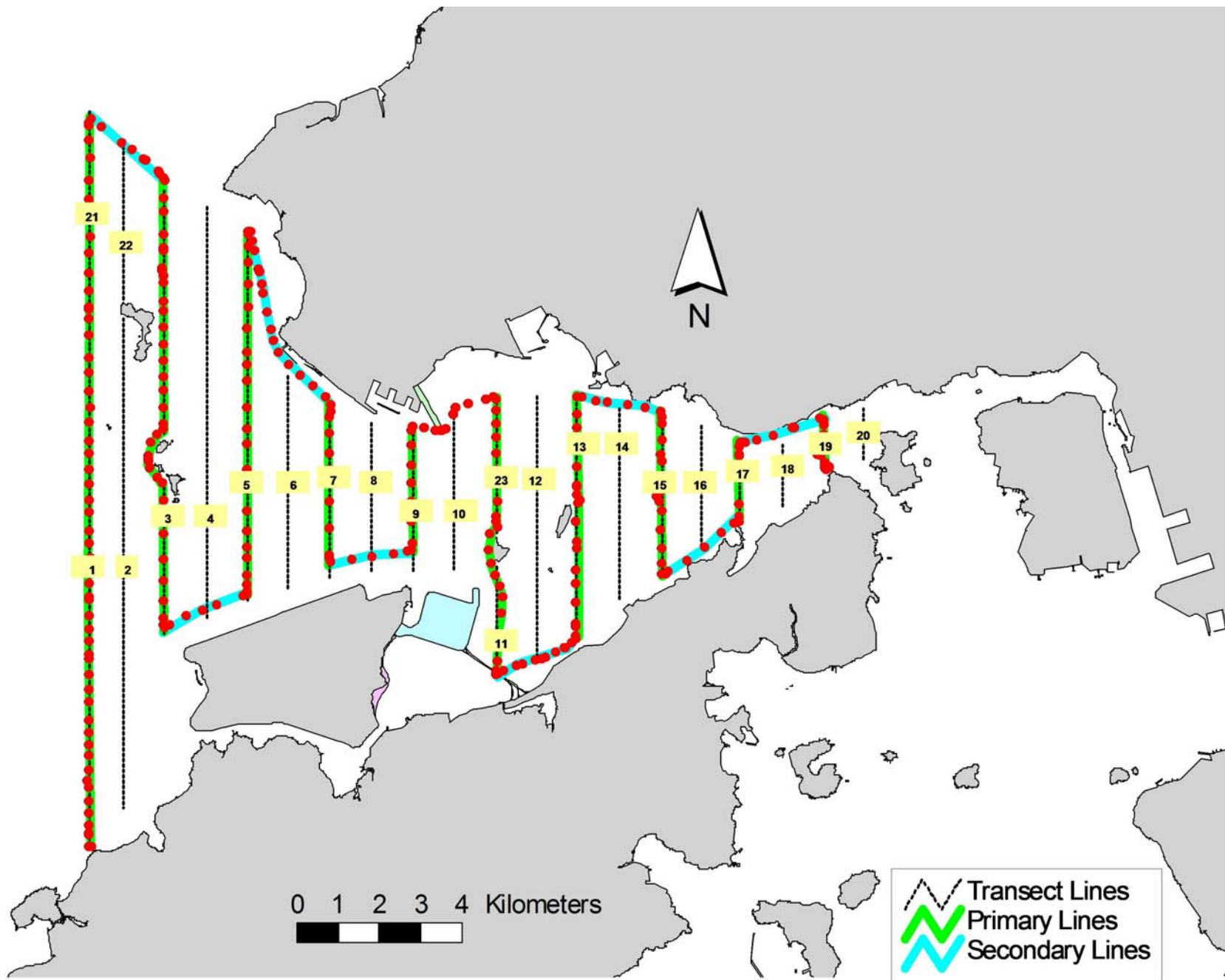


Figure 5. Survey Route on November 18th, 2014 (from HKLR03 project)

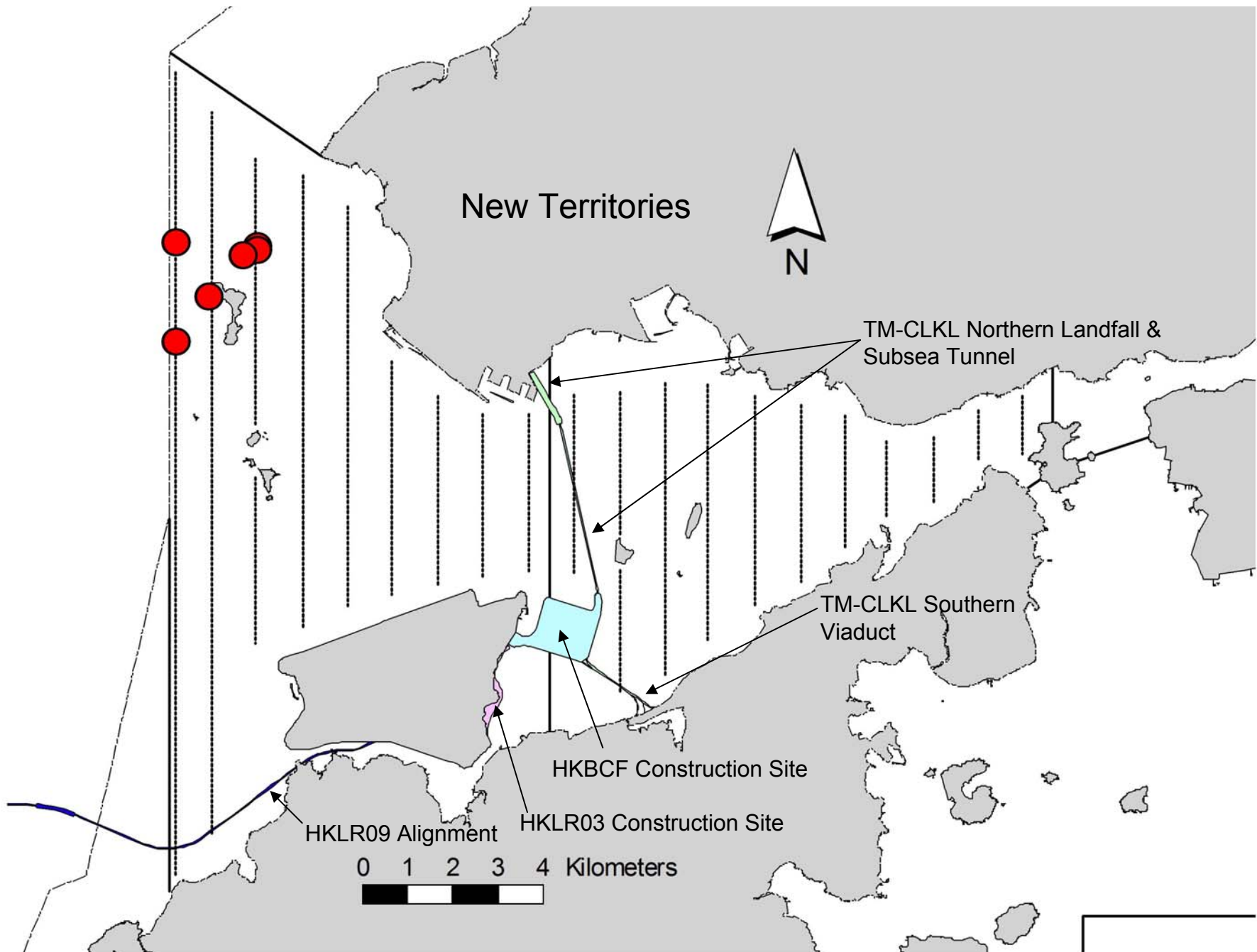


Figure 6. Distribution of Chinese White Dolphin Sightings During November 2014 HKLR03 Monitoring Surveys

Appendix I. HKLR03 Survey Effort Database (November 2014)

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

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
4-Nov-14	NE LANTAU	2	7.47	AUTUMN	STANDARD31516	HKLR	P
4-Nov-14	NE LANTAU	3	9.93	AUTUMN	STANDARD31516	HKLR	P
4-Nov-14	NE LANTAU	2	7.41	AUTUMN	STANDARD31516	HKLR	S
4-Nov-14	NE LANTAU	3	1.59	AUTUMN	STANDARD31516	HKLR	S
4-Nov-14	NW LANTAU	1	1.50	AUTUMN	STANDARD31516	HKLR	P
4-Nov-14	NW LANTAU	2	25.21	AUTUMN	STANDARD31516	HKLR	P
4-Nov-14	NW LANTAU	3	12.20	AUTUMN	STANDARD31516	HKLR	P
4-Nov-14	NW LANTAU	2	12.82	AUTUMN	STANDARD31516	HKLR	S
4-Nov-14	NW LANTAU	3	0.60	AUTUMN	STANDARD31516	HKLR	S
10-Nov-14	NE LANTAU	2	8.28	AUTUMN	STANDARD31516	HKLR	P
10-Nov-14	NE LANTAU	3	9.93	AUTUMN	STANDARD31516	HKLR	P
10-Nov-14	NE LANTAU	2	9.49	AUTUMN	STANDARD31516	HKLR	S
10-Nov-14	NE LANTAU	3	1.00	AUTUMN	STANDARD31516	HKLR	S
10-Nov-14	NW LANTAU	3	26.28	AUTUMN	STANDARD31516	HKLR	P
10-Nov-14	NW LANTAU	4	6.12	AUTUMN	STANDARD31516	HKLR	P
10-Nov-14	NW LANTAU	3	4.40	AUTUMN	STANDARD31516	HKLR	S
10-Nov-14	NW LANTAU	4	1.20	AUTUMN	STANDARD31516	HKLR	S
10-Nov-14	NW LANTAU	5	1.10	AUTUMN	STANDARD31516	HKLR	S
12-Nov-14	NW LANTAU	2	1.30	AUTUMN	STANDARD31516	HKLR	P
12-Nov-14	NW LANTAU	3	30.29	AUTUMN	STANDARD31516	HKLR	P
12-Nov-14	NW LANTAU	2	0.60	AUTUMN	STANDARD31516	HKLR	S
12-Nov-14	NW LANTAU	3	5.98	AUTUMN	STANDARD31516	HKLR	S
12-Nov-14	NW LANTAU	4	0.63	AUTUMN	STANDARD31516	HKLR	S
12-Nov-14	NE LANTAU	2	8.30	AUTUMN	STANDARD31516	HKLR	P
12-Nov-14	NE LANTAU	3	9.41	AUTUMN	STANDARD31516	HKLR	P
12-Nov-14	NE LANTAU	4	2.40	AUTUMN	STANDARD31516	HKLR	P
12-Nov-14	NE LANTAU	2	7.11	AUTUMN	STANDARD31516	HKLR	S
12-Nov-14	NE LANTAU	3	3.48	AUTUMN	STANDARD31516	HKLR	S
18-Nov-14	NW LANTAU	2	13.70	AUTUMN	STANDARD31516	HKLR	P
18-Nov-14	NW LANTAU	3	25.02	AUTUMN	STANDARD31516	HKLR	P
18-Nov-14	NW LANTAU	4	1.76	AUTUMN	STANDARD31516	HKLR	P
18-Nov-14	NW LANTAU	2	2.19	AUTUMN	STANDARD31516	HKLR	S
18-Nov-14	NW LANTAU	3	10.43	AUTUMN	STANDARD31516	HKLR	S
18-Nov-14	NE LANTAU	1	1.78	AUTUMN	STANDARD31516	HKLR	P
18-Nov-14	NE LANTAU	2	14.94	AUTUMN	STANDARD31516	HKLR	P
18-Nov-14	NE LANTAU	3	2.00	AUTUMN	STANDARD31516	HKLR	P
18-Nov-14	NE LANTAU	1	1.20	AUTUMN	STANDARD31516	HKLR	S
18-Nov-14	NE LANTAU	2	7.09	AUTUMN	STANDARD31516	HKLR	S

Appendix II. HKLR03 Chinese White Dolphin Sighting Database (November 2014)

(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
4-Nov-14	1	1435	13	NW LANTAU	1	73	ON	HKLR	827747	806468	AUTUMN	NONE	P
4-Nov-14	2	1539	1	NW LANTAU	2	0	ON	HKLR	827839	804666	AUTUMN	NONE	P
4-Nov-14	3	1558	2	NW LANTAU	2	118	ON	HKLR	825757	804662	AUTUMN	NONE	P
12-Nov-14	1	1050	4	NW LANTAU	3	105	ON	HKLR	826686	805385	AUTUMN	NONE	P
18-Nov-14	1	1255	2	NW LANTAU	2	334	ON	HKLR	827669	806479	AUTUMN	NONE	P
18-Nov-14	2	1307	7	NW LANTAU	3	ND	OFF	HKLR	827559	806149	AUTUMN	NONE	N/A

Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in November 2014

ID#	DATE	STG#	AREA
CH34	18/11/14	2	NW LANTAU
NL46	04/11/14	1	NW LANTAU
NL48	04/11/14	1	NW LANTAU
	18/11/14	2	NW LANTAU
NL104	04/11/14	1	NW LANTAU
NL182	18/11/14	2	NW LANTAU
NL202	12/11/14	1	NW LANTAU
	18/11/14	1	NW LANTAU
	18/11/14	2	NW LANTAU
NL210	12/11/14	1	NW LANTAU
NL256	04/11/14	1	NW LANTAU
NL259	04/11/14	1	NW LANTAU
NL272	12/11/14	1	NW LANTAU
NL286	04/11/14	1	NW LANTAU
	18/11/14	1	NW LANTAU
	18/11/14	2	NW LANTAU
WL05	04/11/14	1	NW LANTAU
	04/11/14	3	NW LANTAU
	12/11/14	1	NW LANTAU
WL97	12/11/14	1	NW LANTAU

NL46_20141104_1



NL48_20141104_1



NL104_20141104_1



NL256_20141104_1



NL259_20141104_1



NL286_20141104_1



WL05_20141104_1



WL05_20141104_3



NL202_20141112_1





Appendix IV. (cont'd)



Appendix IV. (cont'd)

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

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

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

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

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

EVENT	ACTION*			
	ET	IEC	SOR	Contractor
	<ol style="list-style-type: none"> 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. 	<p>Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures.</p> <ol style="list-style-type: none"> 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. 	<p>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.</p> <ol style="list-style-type: none"> 3. Supervise the implementation of additional monitoring and/or any other mitigation measures. 	<p>potential mitigation measures.</p> <ol style="list-style-type: none"> 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

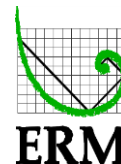
Cumulative Statistics on
Exceedances, Complaints,
Notifications of Summons
and Successful Prosecutions

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	2	28
	Limit	0	2
24-hr TSP	Action	0	5
	Limit	0	1
Water Quality	Action	0	6
	Limit	0	1
Impact Dolphin Monitoring	Action	2	7
	Limit	0	0

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 (November 2014)	2	0	0
Total No. received since project commencement	4	0	0



ENVIRONMENTAL COMPLAINT INVESTIGATION REPORT

Our Reference: 0212330_29October2014_Complaint LOG_02_20141107

Basic Information of Complaint

Reference Number	N04/RW/00026784-14
Date of Complaint Received	27 October 2014
Location of Complaint	Block 7, Melody Garden
Nature of Complaint	Noise nuisance
Complaint Received by	Environmental Protection Department (EPD)
Via	Email
Complainant	A resident of Melody Garden

Details of Complaint

On 27 October 2014, an environmental case was received by EPD regarding to the noise nuisance generated at 01:00-02:00 on 23 October 2014 and 23:15 on 24 October 2014 from derrick lighter near Melody Garden. The Contractor received the complaint notification on 29 October 2014. Subsequently, the ET was informed that the case is categorized as a public concern upon the investigation, discussion and agreement between different parties (i.e. the Contractor (DBJV) and SOR).

Investigation Report

Upon receiving the case notification from EPD on 29 October 2014, the Contractor had promptly checked the works summary.

Based on the works summary from the Contractor on 23 October 2014 and 24 October 2014, no derrick lighter activities near Melody Garden was recorded from this Contract. According to the information provided by the Contractor, during the complaint period only two derrick lighters from this Contract were working within the project site area and site activities conducted under this Contract strictly followed the conditions stated in the approved Construction Noise Permits (CNPs). In addition, the project site area is distant (> 1.5km) from the concerned location the complaint referred to (see Figure 1). Therefore, any noise generated from this Contract's work should be insignificant after distance attenuation.

In addition, the record of subsequent joint weekly site audit on 5 November 2014 further confirmed that all derrick lighters for this Contract were within the project site area.

Based on the above, this case is considered to be not related to this Contract's work and is thus invalid.

Mitigation Measures and Follow-Up Actions Recommended to/Undertaken by Contractor

The Contractor was reminded to adhere strictly to the conditions of Construction Noise Permit and to implement all relevant noise mitigation measures recommended or specified in the EIA Report, EM&A Manual, EMP, Method Statements, General and Particular Specifications of this Contract to avoid causing noise nuisance.

The Contractor is also reminded to ensure that the construction plant deployed for the works during restricted hours is in strict compliance with the relevant CNP granted.

Date of File Closed : 7 November 2014

Approved and Filed by:

A handwritten signature in black ink, appearing to be 'Jovy Tam', written in a cursive style.

(Jovy Tam, ET Leader)
Date: 14 November 2014

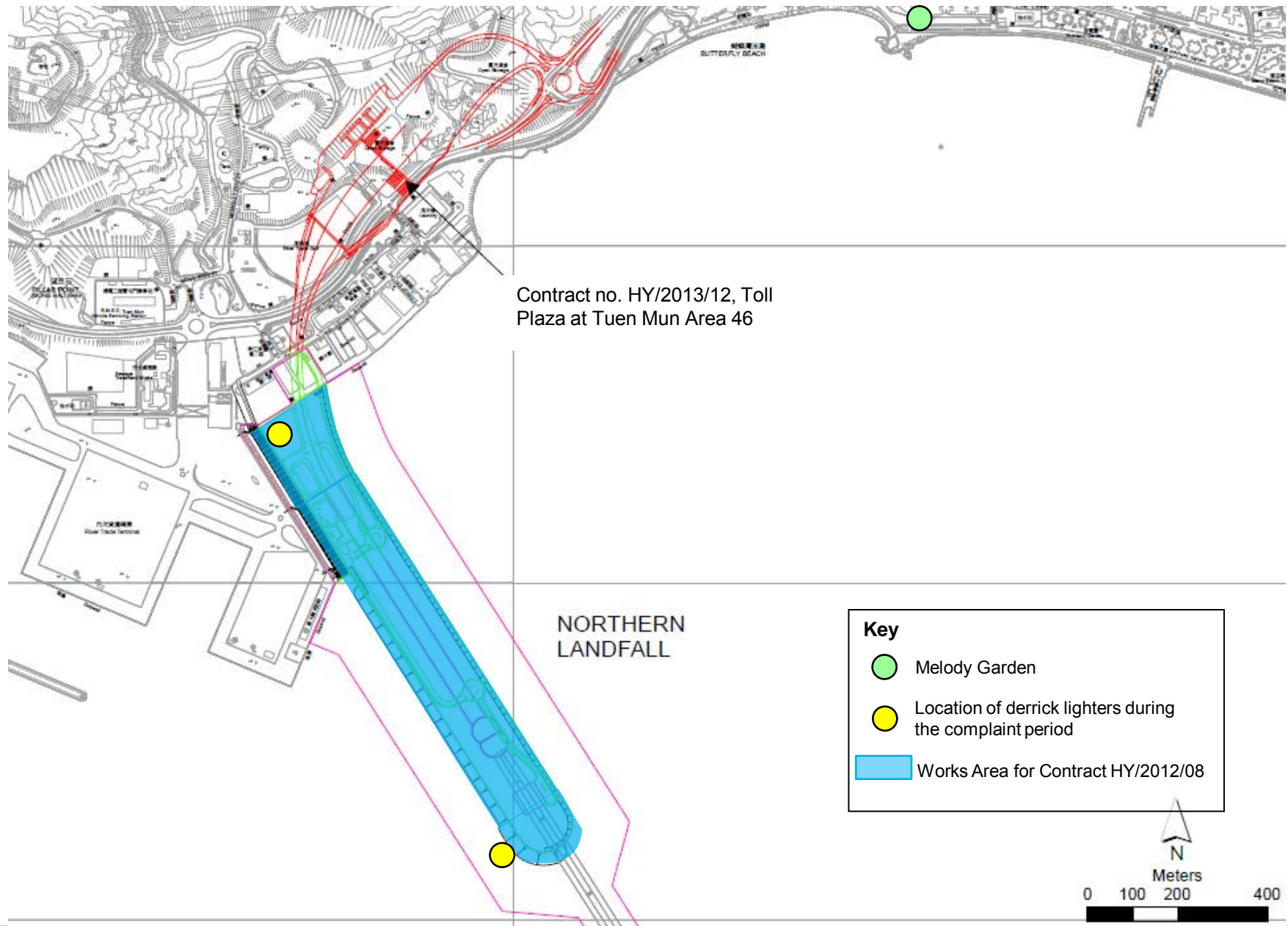
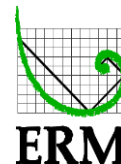


Figure 1

HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
Noise Complaint Investigation – Project Site Layout

Environmental
Resources
Management





ENVIRONMENTAL COMPLAINT INVESTIGATION REPORT

Our Reference: 0212330_11November2014_CompLog_03

Basic Information of Complaints

Reference Numbers:	N04/RW/00028104-14 N04/RW/00028199-14
Date of Complaints Received	11 November 2014
Location of Complaints	Tuen Mun River Trade Terminal
Nature of Complaints	Dust emission
Complaints Received by	Environmental Protection Department (EPD)
Via	Email
Complainants	Worker at River Trade Terminal

Details of Complaints

On 11 November 2014, two potential complaint cases were received by EPD regarding to the dust emission by works area nearby the River Trade Terminal. The Contractor received the complaint notification on 12 November 2014. On 12 November 2014, The ET was informed that the two cases are categorized as complaints in nature upon the investigation, discussion and agreement between different parties (i.e. the Contractor (DBJV) and SOR).

Investigation Report

Upon receiving the case notification from EPD on 11 November 2014, the Contractor had promptly checked the works summary.

Based on the record of subsequent joint site investigation with the Contractor and EPD on 19 November 2014, no dust nuisance was recorded at the entrance of works area and activities conducted in this Contract’s work has strictly followed the requirements stated in the EP (EP-354/2009/B) (see photo records on *Annex A*). According to the construction information provided by the Contractor, the majority of construction works during the complaint period were Excavation Works for launching shaft at Reclamation Works Area Portion N-A; Land Bored Piling Works at Reclamation Works Area Portion N-A and Surcharge Set Up at Reclamation Works Area Portions N-B and N-C. The major construction activities undertaken during the complaint period are considered to have minor effect on dust emission. In addition, the Contractor has implemented the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual (e.g. watering at least 12 times per day on all exposed soil within the Project site and associated work areas; use of wheel washing facilities; hydro-seeding of area where works have been completed) throughout the construction period.

According to the impact air quality monitoring results during the complaint period in November 2014 at the close vicinity of Reclamation Works Area (ASR1 & ASR5), no exceedance was recorded. This implies that no unacceptable adverse impact on air quality was resulting from the land-based works under this Contract during the period of complaint, and the implemented mitigation measures are considered sufficient.

It is considered that the observed dust emission may represent sporadic event associated with traffic emissions and anthropogenic activities during rush hour at River Trade Terminal.

Based on the above, the two complaint cases are considered to be not related to this Contract’s work and are thus invalid.

Mitigation Measures and Follow-Up Actions Recommended to/Undertaken by Contractor

During construction, the Contractor is in accordance with the requirements of the relevant environmental regulations and the implementation of mitigation measures which included regular water spraying within the construction site area; use of wheel washing facilities; covering of idle stockpiles.

The Contractor has been reminded to adhere strictly to implement all relevant dust mitigation measures recommended or specified in the EP (EP-354/2009/B), the approved EIA and the Updated EM&A Manual of this Project to avoid causing dust nuisance. No additional action is required.

Date of File Closed : 5 December 2014

Approved and Filed by:



(Jovy Tam, ET Leader)

Date: 5 December 2014

Project	Works	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2014-11-02	AQMS1	Cloudy	08:44	1-hour TSP	208	ug/m3
TMCLKL	HY/2012/08	2014-11-02	AQMS1	Cloudy	09:46	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2014-11-02	AQMS1	Cloudy	10:48	1-hour TSP	197	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR1	Cloudy	08:33	1-hour TSP	216	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR1	Cloudy	09:35	1-hour TSP	261	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR1	Cloudy	10:37	1-hour TSP	277	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR5	Cloudy	08:22	1-hour TSP	282	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR5	Cloudy	09:24	1-hour TSP	248	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR5	Cloudy	10:26	1-hour TSP	235	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR6	Cloudy	08:10	1-hour TSP	155	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR6	Cloudy	09:12	1-hour TSP	160	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR6	Cloudy	10:14	1-hour TSP	181	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR10	Cloudy	08:00	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR10	Cloudy	09:02	1-hour TSP	122	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR10	Cloudy	10:04	1-hour TSP	174	ug/m3
TMCLKL	HY/2012/08	2014-11-05	AQMS1	Cloudy	13:58	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2014-11-05	AQMS1	Cloudy	15:00	1-hour TSP	193	ug/m3
TMCLKL	HY/2012/08	2014-11-05	AQMS1	Cloudy	16:02	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR1	Cloudy	13:46	1-hour TSP	111	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR1	Cloudy	14:48	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR1	Cloudy	15:50	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR5	Cloudy	13:35	1-hour TSP	193	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR5	Cloudy	14:37	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR5	Cloudy	15:39	1-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR6	Cloudy	13:24	1-hour TSP	169	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR6	Cloudy	14:26	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR6	Cloudy	15:28	1-hour TSP	132	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR10	Cloudy	13:13	1-hour TSP	88	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR10	Cloudy	14:15	1-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR10	Cloudy	15:17	1-hour TSP	90	ug/m3
TMCLKL	HY/2012/08	2014-11-08	AQMS1	Rainy	14:37	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2014-11-08	AQMS1	Rainy	15:39	1-hour TSP	213	ug/m3
TMCLKL	HY/2012/08	2014-11-08	AQMS1	Rainy	16:41	1-hour TSP	228	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR1	Rainy	14:26	1-hour TSP	196	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR1	Rainy	15:28	1-hour TSP	215	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR1	Rainy	16:30	1-hour TSP	242	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR5	Rainy	14:14	1-hour TSP	201	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR5	Rainy	15:16	1-hour TSP	247	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR5	Rainy	16:18	1-hour TSP	181	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR6	Rainy	14:03	1-hour TSP	179	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR6	Rainy	15:05	1-hour TSP	243	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR6	Rainy	16:07	1-hour TSP	152	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR10	Rainy	13:52	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR10	Rainy	14:54	1-hour TSP	206	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR10	Rainy	15:56	1-hour TSP	200	ug/m3
TMCLKL	HY/2012/08	2014-11-11	AQMS1	Sunny	13:53	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2014-11-11	AQMS1	Sunny	14:55	1-hour TSP	147	ug/m3
TMCLKL	HY/2012/08	2014-11-11	AQMS1	Sunny	15:57	1-hour TSP	149	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR1	Sunny	13:42	1-hour TSP	290	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR1	Sunny	14:44	1-hour TSP	266	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2014-11-11	ASR1	Sunny	15:46	1-hour TSP	320	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR5	Sunny	13:30	1-hour TSP	324	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR5	Sunny	14:32	1-hour TSP	245	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR5	Sunny	15:34	1-hour TSP	197	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR6	Sunny	13:19	1-hour TSP	211	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR6	Sunny	14:21	1-hour TSP	164	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR6	Sunny	15:23	1-hour TSP	138	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR10	Sunny	13:08	1-hour TSP	131	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR10	Sunny	14:10	1-hour TSP	129	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR10	Sunny	15:12	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2014-11-02	AQMS1	Cloudy	11:50	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR1	Cloudy	11:39	24-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR5	Cloudy	11:28	24-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR6	Cloudy	11:16	24-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2014-11-02	ASR10	Cloudy	11:06	24-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	2014-11-05	AQMS1	Cloudy	17:04	24-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR1	Cloudy	16:52	24-hour TSP	82	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR5	Cloudy	16:41	24-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR6	Cloudy	16:30	24-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2014-11-05	ASR10	Cloudy	16:19	24-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2014-11-08	AQMS1	Rainy	17:43	24-hour TSP	72	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR1	Rainy	17:32	24-hour TSP	70	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR5	Rainy	17:20	24-hour TSP	78	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR6	Rainy	17:09	24-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2014-11-08	ASR10	Rainy	16:58	24-hour TSP	63	ug/m3
TMCLKL	HY/2012/08	2014-11-11	AQMS1	Sunny	16:59	24-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR1	Sunny	16:48	24-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR5	Sunny	16:36	24-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR6	Sunny	16:25	24-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2014-11-11	ASR10	Sunny	16:14	24-hour TSP	67	ug/m3

Action and Limit Levels of 1-hour TSP Monitoring

Station	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
ASR1	331	500
ASR5	340	500
AQMS1	335	500
ASR6	338	500
ASR10	337	500

Action and Limit Levels of 24-hour TSP Monitoring

Station	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
ASR1	213	260
ASR5	238	260
AQMS1	213	260
ASR6	238	260
ASR10	214	260



Annex A Photo Records taken during Site Investigation

*Note: Photos taken on 19/11/2014



Water truck was observed in used during site investigation. (Reclamation Works Area)



Water truck was observed in used during site investigation. (Haul road at River Trade Terminal)



Annex A Photo Records taken during Site Investigation

*Note: Photos taken on 19/11/2014



Wheel washing facilities is adequately maintained. (Site entrance at Reclamation Works Area)



Hydroseeding and access roads paved as soon as practicable after works have been completed on soil exposed area.
(Reclamation Works Area)



Annex A Photo Records taken during Site Investigation

*Note: Photos taken on 19/11/2014



Stockpile was observed wet. (Reclamation Works Area - Portion N-C)

Email
message

Environmental
Resources
Management

To ENVIRON - Hong Kong, Limited (ENPO)

From ERM- Hong Kong, Limited

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

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 27 November 2014

16/F Berkshire House,
25 Westlands Road
Quarry Bay, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jovy.tam@erm.com



ERM

Dear Sir or Madam,

Please find attached the Notification of Exceedance (NOE) of the following
Log no.:

0212330_14November2014_1hrTSP_Station ASR1
0212330_14November2014_1hrTSP_Station ASR1

A total of two Action Level Exceedances were recorded on 14 November
2014.

Regards,

A handwritten signature in black ink, appearing to read 'Jovy Tam', is positioned above the printed name.

Mr Jovy Tam
Environmental Team Leader

CONFIDENTIALITY NOTICE

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2012/08
 TUEN MUN – CHEK LAP KOK LINK –
 NORTHERN CONNECTION SUB-SEA TUNNEL SECTION

Air Quality Impact Monitoring
 Notification of Exceedance

Log No.	0212330_14November2014_1hrTSP_Station ASR1 0212330_14November2014_1hrTSP_Station ASR1 [Total No. of Exceedances = 2]	
Date	14 November 2014 (Measured) 27 November 2014 (Laboratory results received by ERM)	
Monitoring Station	ASR1, ASR5, ASR6, ASR10 and AQMS1	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213
Limit Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	500
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	260
Measured Levels	Action Level Exceedance for 1-hr TSP is observed at ASR1 ($404 \mu\text{g}/\text{m}^3$) during 0915 - 1015 hrs. Action Level Exceedance for 1-hr TSP is observed at ASR1 ($396 \mu\text{g}/\text{m}^3$) during 1017 - 1117 hrs.	
Works Undertaken (at the time of monitoring event)	On 14 November 2014, Excavation Works for launching shaft were carried out at Reclamation Works Area Portion N-A; Land Bored Piling Works at Reclamation Works Area Portion N-A and Surcharge Set Up at Reclamation Works Area Portions N-B and N-C.	

Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance(s) are unlikely to be due to the Project, in view of the following:</p> <ul style="list-style-type: none"> • Considering the relatively higher levels of 1-hour TSP between 0900 and 1130 hrs at most monitoring stations, it is probably unlikely that the level of land-based construction works under this Contract can cause increase in 1-hour TSP of this magnitude and scale. It is considered that the observed exceedances for 1-hour TSP at ASR1 may represent sporadic event associated with traffic emissions and anthropogenic activities during morning rush hour at River Trade Terminal. • According to the construction information provided by the Contractor, the majority of construction works on 14 November 2014 were Excavation Works for launching shaft at Reclamation Works Area Portion N-A; Land Bored Piling Works at Reclamation Works Area Portion N-A and Surcharge Set Up at Reclamation Works Area Portions N-B and N-C. During the period of the land-based construction works, the Contractor has implemented the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual (e.g. water spraying by water trucks on exposed soil within the Project site and associated work areas; covering the idle stockpiles properly with tarpaulin; use of wheel washing facilities; hydro-seeding of area where works have been completed). • Whilst exceedances of Action Level were observed at ASR1, the 24-hr TSP level at the monitoring station (ASR1 = 115 µg/m³) on 14 November 2014 were in compliance with the Action and Limit Levels. The 1-hr TSP at ASR1 returned to level below the Action/Limit Levels on the same day. • Same level and extent of construction works were carried out at the same works area on 17th, 20th, 23rd and 26th November whilst no exceedance was recorded. • As stated in the EIA report (Section 4.2.3), the background TSP level of Tuen Mun is higher than the other region of Hong Kong, thus the exceedances may be also contributed cumulatively by the other construction works / traffic within the Tuen Mun Area rather than causing by the construction works of the Project.
Actions Taken / To Be Taken	<p>Based on the record of subsequent weekly site inspection on 19 November 2014, no dust nuisance was recorded at the Reclamation Works Area and activities conducted in this Contract's work has strictly followed the requirements stated in the EP (EP-354/2009/B) (see photo records on <i>Annex A</i>). In addition, the Contractor has implemented the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual (e.g. watering at least 12 times per day on all exposed soil within the Project site and associated work areas; covering the idle stockpiles properly with tarpaulin; use of wheel washing facilities; hydro-seeding of area where works have been completed) throughout the construction period, no additional mitigation is deemed necessary. The Enhanced TSP Monitoring has commenced on 24 October 2014, the ET will monitor for future trends in exceedances.</p>
Remarks	<p>The monitoring results and the locations of air quality monitoring stations are attached.</p>

Project	Works	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2014-11-14	ASR10	Sunny	08:40	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR10	Sunny	09:42	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR10	Sunny	10:44	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR6	Sunny	08:52	1-hour TSP	130	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR6	Sunny	09:54	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR6	Sunny	10:56	1-hour TSP	160	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR5	Sunny	09:03	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR5	Sunny	10:05	1-hour TSP	226	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR5	Sunny	11:07	1-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR1	Sunny	09:15	1-hour TSP	404	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR1	Sunny	10:17	1-hour TSP	396	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR1	Sunny	11:19	1-hour TSP	210	ug/m3
TMCLKL	HY/2012/08	2014-11-14	AQMS1	Sunny	09:27	1-hour TSP	133	ug/m3
TMCLKL	HY/2012/08	2014-11-14	AQMS1	Sunny	10:29	1-hour TSP	148	ug/m3
TMCLKL	HY/2012/08	2014-11-14	AQMS1	Sunny	11:31	1-hour TSP	141	ug/m3
TMCLKL	HY/2012/08	2014-11-17	AQMS1	Sunny	14:06	1-hour TSP	176	ug/m3
TMCLKL	HY/2012/08	2014-11-17	AQMS1	Sunny	16:08	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2014-11-17	AQMS1	Sunny	16:10	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR1	Sunny	13:55	1-hour TSP	221	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR1	Sunny	14:57	1-hour TSP	192	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR1	Sunny	15:59	1-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR5	Sunny	13:44	1-hour TSP	264	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR5	Sunny	14:46	1-hour TSP	159	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR5	Sunny	15:48	1-hour TSP	152	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR6	Sunny	13:33	1-hour TSP	242	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR6	Sunny	14:35	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR6	Sunny	15:37	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR10	Sunny	13:22	1-hour TSP	176	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR10	Sunny	14:24	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR10	Sunny	15:26	1-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR10	Sunny	07:40	1-hour TSP	63	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR10	Sunny	08:42	1-hour TSP	60	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR10	Sunny	09:44	1-hour TSP	68	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR6	Sunny	07:50	1-hour TSP	66	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR6	Sunny	08:52	1-hour TSP	63	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR6	Sunny	09:54	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR5	Sunny	08:02	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR5	Sunny	09:04	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR5	Sunny	10:06	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR1	Sunny	08:13	1-hour TSP	107	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR1	Sunny	09:15	1-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR1	Sunny	10:17	1-hour TSP	146	ug/m3
TMCLKL	HY/2012/08	2014-11-20	AQMS1	Sunny	08:24	1-hour TSP	108	ug/m3
TMCLKL	HY/2012/08	2014-11-20	AQMS1	Sunny	09:26	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2014-11-20	AQMS1	Sunny	10:28	1-hour TSP	92	ug/m3
TMCLKL	HY/2012/08	2014-11-23	AQMS1	Sunny	09:32	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2014-11-23	AQMS1	Sunny	10:34	1-hour TSP	84	ug/m3
TMCLKL	HY/2012/08	2014-11-23	AQMS1	Sunny	11:36	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR1	Sunny	09:20	1-hour TSP	191	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR1	Sunny	10:22	1-hour TSP	192	ug/m3

Project	Works	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2014-11-23	ASR1	Sunny	11:24	1-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR5	Sunny	09:08	1-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR5	Sunny	10:10	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR5	Sunny	11:12	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR6	Sunny	08:57	1-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR6	Sunny	09:59	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR6	Sunny	11:01	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR10	Sunny	08:45	1-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR10	Sunny	09:47	1-hour TSP	67	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Sunny	10:49	1-hour TSP	71	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Cloudy	13:03	1-hour TSP	96	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Cloudy	14:05	1-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Cloudy	15:07	1-hour TSP	110	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR6	Cloudy	13:14	1-hour TSP	226	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR6	Cloudy	14:16	1-hour TSP	137	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR6	Cloudy	15:18	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR5	Cloudy	13:25	1-hour TSP	150	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR5	Cloudy	14:27	1-hour TSP	168	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR5	Cloudy	15:29	1-hour TSP	215	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR1	Cloudy	13:37	1-hour TSP	102	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR1	Cloudy	14:39	1-hour TSP	189	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR1	Cloudy	15:41	1-hour TSP	188	ug/m3
TMCLKL	HY/2012/08	2014-11-26	AQMS1	Cloudy	13:48	1-hour TSP	112	ug/m3
TMCLKL	HY/2012/08	2014-11-26	AQMS1	Cloudy	14:50	1-hour TSP	191	ug/m3
TMCLKL	HY/2012/08	2014-11-26	AQMS1	Cloudy	15:52	1-hour TSP	240	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR10	Sunny	11:46	24-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR6	Sunny	11:58	24-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR5	Sunny	12:09	24-hour TSP	104	ug/m3
TMCLKL	HY/2012/08	2014-11-14	ASR1	Sunny	12:21	24-hour TSP	115	ug/m3
TMCLKL	HY/2012/08	2014-11-14	AQMS1	Sunny	12:33	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2014-11-17	AQMS1	Sunny	17:12	24-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR1	Sunny	17:01	24-hour TSP	107	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR5	Sunny	16:50	24-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR6	Sunny	16:39	24-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	2014-11-17	ASR10	Sunny	16:28	24-hour TSP	88	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR10	Sunny	10:46	24-hour TSP	64	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR6	Sunny	10:56	24-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR5	Sunny	11:08	24-hour TSP	101	ug/m3
TMCLKL	HY/2012/08	2014-11-20	ASR1	Sunny	11:19	24-hour TSP	87	ug/m3
TMCLKL	HY/2012/08	2014-11-20	AQMS1	Sunny	11:30	24-hour TSP	91	ug/m3
TMCLKL	HY/2012/08	2014-11-23	AQMS1	Sunny	12:38	24-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR1	Sunny	12:26	24-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR5	Sunny	12:14	24-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR6	Sunny	12:03	24-hour TSP	65	ug/m3
TMCLKL	HY/2012/08	2014-11-23	ASR10	Sunny	11:51	24-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR10	Cloudy	16:09	24-hour TSP	69	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR6	Cloudy	16:20	24-hour TSP	82	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR5	Cloudy	16:31	24-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	2014-11-26	ASR1	Cloudy	15:43	24-hour TSP	95	ug/m3
TMCLKL	HY/2012/08	2014-11-26	AQMS1	Cloudy	16:54	24-hour TSP	82	ug/m3



Annex A Photo Records taken during Weekly Site Inspection

*Note: Photos taken on 19/11/2014



Water truck was observed in used during site investigation. (Reclamation Works Area)



Water truck was observed in used during site investigation. (Haul road at River Trade Terminal)



Annex A Photo Records taken during Weekly Site Inspection

*Note: Photos taken on 19/11/2014



Wheel washing facilities is adequately maintained. (Site entrance at Reclamation Works Area)



Hydroseeding and access roads paved as soon as practicable after works have been completed on soil exposed area.
(Reclamation Works Area)

Appendix M

Waste Flow Table

Appendix D – Monthly Summary Waste Flow Table

Name of Department: HyD

Contract No. / Works Order No.: HY/2012/08

Monthly Summary Waste Flow Table for November 2014 [to be submitted not later than the 15th day of each month following reporting month] (All quantities shall be rounded off to 3 decimal places.)

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)
2013 Sub-total	3.718	0.000	0.000	0.000	3.718
Jan-2014	9.012	0.000	0.000	0.000	9.012
Feb-2014	0.000	0.000	0.000	0.000	0.000
Mar-2014	0.105	0.000	0.000	0.000	0.105
Apr-2014	0.022	0.000	0.000	0.000	0.022
May-2014	1.016	0.000	0.000	0.000	1.016
Jun-2014	4.393	0.000	0.000	0.000	4.393
Half Year Sub-total	14.548	0.000	0.000	0.000	14.548
Jul-2014	14.405	0.000	0.000	0.000	14.405
Aug-2014	12.728	0.000	0.000	0.000	12.728
Sep-2014	6.843	0.000	0.000	0.000	6.843
Oct-2014	1.228	0.000	0.000	0.000	1.228
Nov-2014	0.595	0.000	0.000	0.000	0.595
Dec-2014					
Project Total Quantities	54.065	0.000	0.000	0.000	54.065

Month	Monthly Construction & Demolition Material Movements (Import Fill Materials & Marine Mud Disposal)							
	Imported Fill to WA 23 & Reclamation Area (Rockfill 400)	Imported Fill to WA 23 & Reclamation Area (Rockfill 200)	Imported Fill to WA 23 & Reclamation Area (Rockfill Type A)	Imported Fill to Reclamation Area (Public Fill) (by Barge)	* Imported Fill to Reclamation Area (Public Fill)(From Rambler Channel) (by Truck)	* Imported Fill to Reclamation Area (From RTT Barging Point) (by Truck)	Marine Disposal (Cat. L)	Marine Disposal (Cat. M _P & M _F)
	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 ton)	(in '000 m ³)	(in '000 m ³)
2013 Sub-total	211.541	2.508	19.460	0.000	0.000	45.472	61.600	18.200
Jan-2014	177.300	4.050	8.544	0.000	0.000	124.412	34.000	12.500
Feb-2014	143.891	27.825	5.371	0.000	0.000	81.296	18.500	24.500
Mar-2014	257.304	53.388	27.958	113.789	0.000	63.961	37.300	40.450
Apr-2014	198.245	10.186	41.702	191.094	0.000	26.640	28.600	15.400
May-2014	236.816	4.612	65.308	150.749	43.718	15.165	18.700	29.150
Jun-2014	233.430	2.856	37.103	108.667	25.433	0.000	40.700	7.700
Half Year Sub-total	1246.986	102.917	185.986	564.299	69.151	311.474	177.800	129.700
Jul-2014	177.859	0.000	65.758	161.817	22.958	0.000	37.950	7.150
Aug-2014	174.710	23.110	33.127	351.703	40.379	0.000	12.100	0.000
Sep-2014	124.251	28.994	23.424	476.618	22.932	0.000	0.000	0.000
Oct-2014	22.217	22.729	17.547	481.962	0.000	0.000	0.000	0.000
Nov-2014	25.889	22.640	16.268	175.370	0.000	0.000	2.320	0.000
Dec-2014								
Project Total Quantities	1983.453	202.898	361.570	2211.769	155.420	356.946	291.770	155.050

• Fields under review. These are good imported purchased material, not wastes generated from the site.

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
2013 Sub-total	0.000	0.000	0.380	0.380	0.000	0.000	0.000	0.000	0.172
Jan-2014	0.000	0.000	0.130	0.130	0.000	0.000	0.000	0.000	0.045
Feb-2014	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.020	0.028
Mar-2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.036
Apr-2014	0.000	0.000	0.160	0.160	0.000	0.000	0.000	0.000	0.026
May-2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.042
Jun-2014	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.030	0.030
Half Year Sub-total	0.000	0.000	0.290	0.290	0.000	0.000	0.050	0.050	0.207
Jul-2014	0.000	0.000	0.300	0.300	0.000	0.000	0.000	0.000	0.033
Aug-2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.022
Sep-2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.039
Oct-2014	0.000	0.000	0.080	0.080	0.000	0.000	0.060	0.060	0.033
Nov-2014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.050
Dec-2014									
Project Total Quantities	0.000	0.000	1.050	1.050	0.000	0.000	0.110	0.110	0.556

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 ³)	(in '000 m ³)
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 ³)
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 m³. (**ER Part 8 Clause 8.8.5 (d) (ii)** refers).