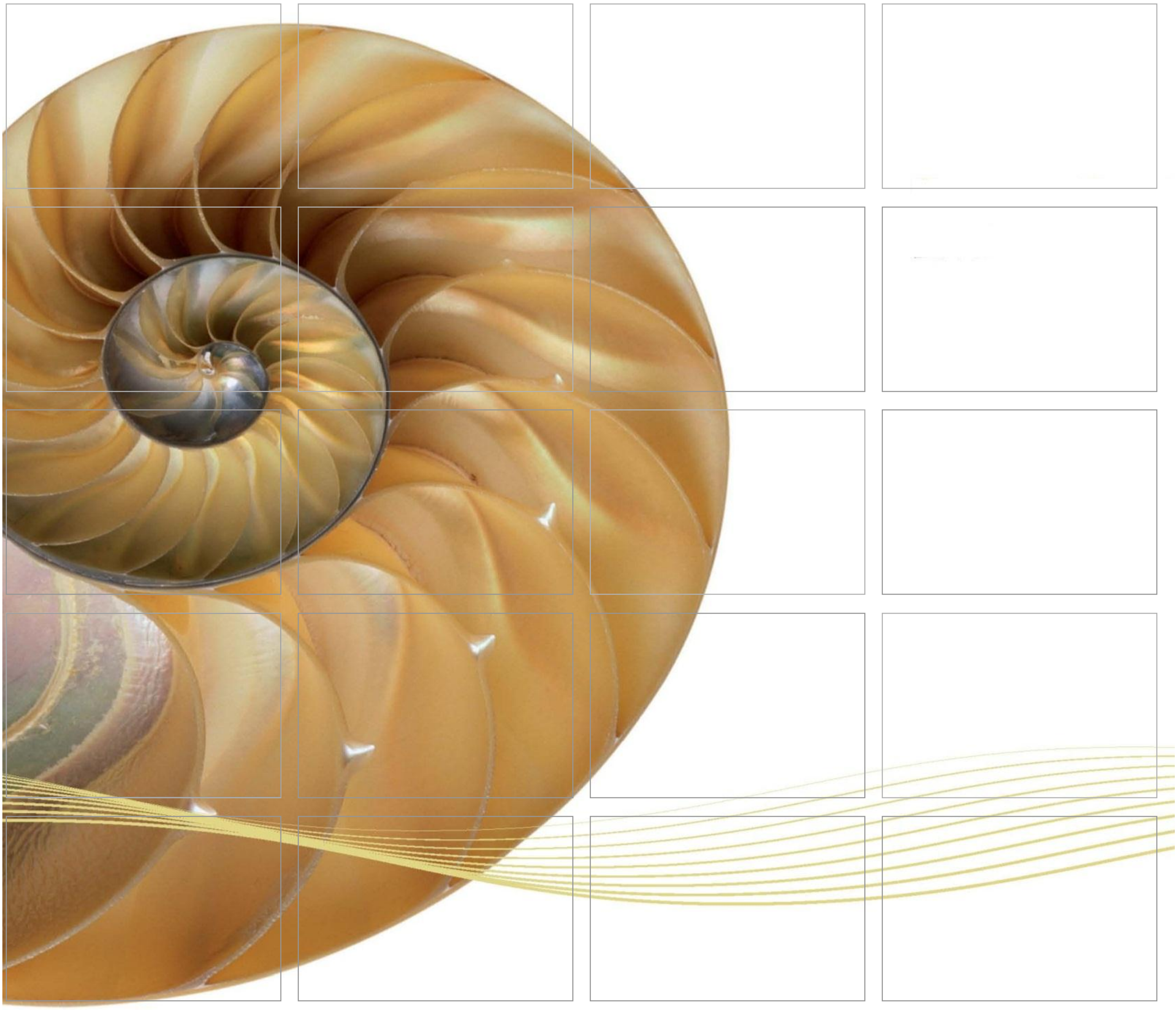
Report



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

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

12 December 2013

Environmental Resources Management
16/F, DCH Commercial Centre
25 Westlands Road
Quarry Bay, Hong Kong
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Contract No. HY/2012/08
Tuen Mun – Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section

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

Document Code: 0212330_1st Monthly EM&A_20131212.doc

Client:

DBJV

Project No:

0212330

Summary:

This document presents the First Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link Northern Connection Sub-sea Tunnel Section.

Date:
12 December 2013

Approved by:

Mr Craig Reid
Partner

Certified by:

Mr Jovy Tam
ET Leader

	1st Monthly EM&A Report	VAR	JT	CAR	12/12/13
Revision	Description	By	Checked	Approved	Date

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ENVIRON

Ref.: HYDHZMBEEM00_0_1523L.13 16 December 2013

AECOM
Supervising Officer Representative's Office
Room 201, 2nd Floor,
River Trade Terminal Office Building,
201 Lung Mun Road, Tuen Mun, Hong Kong

By Fax (2450 3099) and By Post

Attention: Messrs. Edwin Ching / Mr. Andy Westmorelan

Dear Sir,

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 2013 (EP-354/2009/A)

Reference is made to the First Monthly Environmental Monitoring and Audit (EM&A) Report for November 2013 certified by the ET Leader (ET's ref.: "0212330_1st Monthly EM&A_20131212.doc", dated 12 December 2013), and provided to us via email on 16 December 2013.

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

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,

Tony Cheng
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 – Mr. C.F. Kwong (By Fax: 2670 2798)

Internal: DY, YH, PL, ENPO Site

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EXECUTIVE SUMMARY

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

The construction phase of the Project under the *EP-354/2009/A* 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, noise, water quality, marine ecological monitoring and environmental site inspections, were commenced on 1 November 2013.

This is the first monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 November 2013 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

- Removal of existing seawall;
- Dredging;
- Placement of rock grade 400; and,
- Delivery of 149 seawall blocks.

Land-based Works

- Sorting of rock material started at Tsing Yi (WA 23 area); and,
- Completion of chain-link fence, site hoarding works, site formation works (Site WA 18).

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

24-hour TSP monitoring	5 sessions
1-hour TSP monitoring	5 sessions

Impact Water Quality Monitoring	14 sessions
Impact dolphin monitoring	2 sessions
Joint Environmental site inspection	4 sessions

Daily marine mammal exclusion zone monitoring was undertaken during the period of dredging activities undertaken. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* was recorded in November 2013 during the exclusion zone monitoring.

Summary of Breaches of Action/Limit Levels

Breaches of Action and Limit Levels for Air Quality

Four exceedances of Action Level and one exceedance of Limit Level for air quality were recorded during the reporting month. The exceedances were considered not related to the construction works of this Contract upon further investigation.

Breaches of Action and Limit Levels for Water Quality

No exceedances of Action and Limit Levels for water quality were recorded during the reporting month.

Dolphin Monitoring

During this month of dolphin monitoring, no adverse impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations. Due to monthly variation in dolphin occurrence within the study area, it would be more appropriate to draw conclusion on whether any 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 the Contract was recorded in this reporting period.

No environmental complaint was received in this reporting period.

No environmental summons was received in this reporting period.

Reporting Change

There was no reporting change required in the reporting period.

Upcoming Works for the Next Reporting Period

Works to be undertaken in the next monitoring period of December 2013 include the following:

Marine-based Works

- Seawall construction;
- Removal of existing seawall armour rock;
- Temporary seawall;
- Additional Ground investigation;
- Reclamation; and,
- Temporary pontoon installation at RTT.

Land-based Works

- Presonstruction for site office (WA 18);
- Hoarding erection & building demolition (Portion N6); and
- CLP substation construction.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of December 2013 are mainly associated with dust, marine water quality, marine ecology and waste management issues.

1 INTRODUCTION

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-145/2009), 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 (EP-354/2009A) was issued on 8 December 2010.

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 ("the Contract") 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).

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.

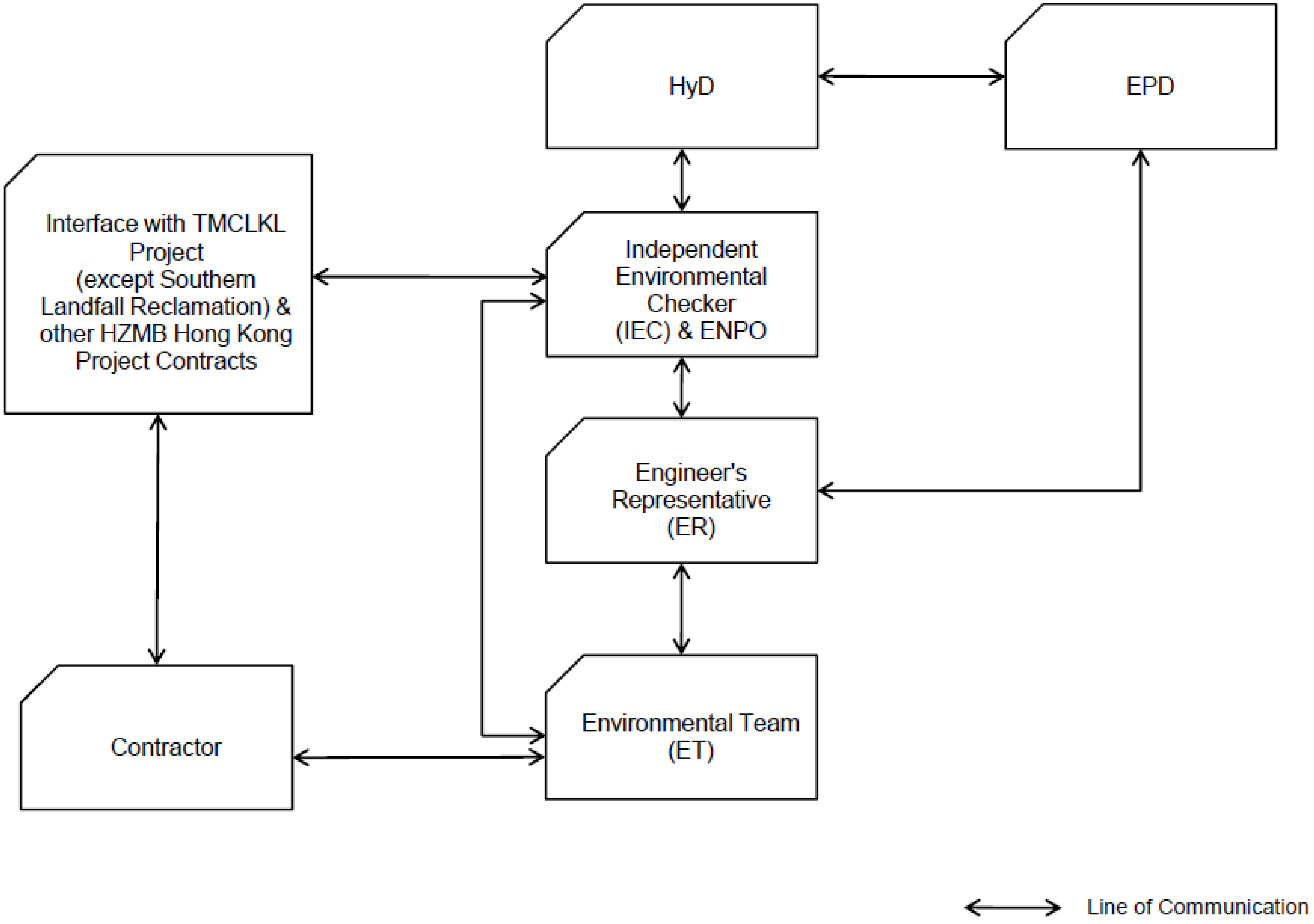

Figure 1.1

Contract No. HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
Project Organization

DATE: 06/03/2013

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1.2 SCOPE OF REPORT

This is the first 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 2013.

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
SOR (AECOM Asia Company Limited)	Chief Resident Engineer	Edwin Ching	2450 3111	2450 3099
		Andrew Westmoreland	2450 3511	2450 3099
ENPO / IEC (ENVIRON Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2888	3465 2899
	IEC	Tony Cheng	3465 2888	3465 2899
Contractor (Dragages – Bouygues Joint Venture)	Environmental Manager	C.F. Kwong	2293 7322	2670 2798
	Environmental Officer	Bryan Lee	2293 7323	2670 2798
	24hour 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 three-month rolling construction programme is shown in *Appendix B*.

As per DBJV's information, details of major construction works carried out in this reporting period are as follows:

Marine-based Works

- Removal of existing seawall;
- Dredging;
- Placement of rock grade 400; and
- Delivery of 149 seawall blocks.

Land-based Works

- Sorting of rock material started at Tsing Yi (WA 23 area); and
- Completion of chain-link fence, site hoarding works, site formation works (Site WA 18).

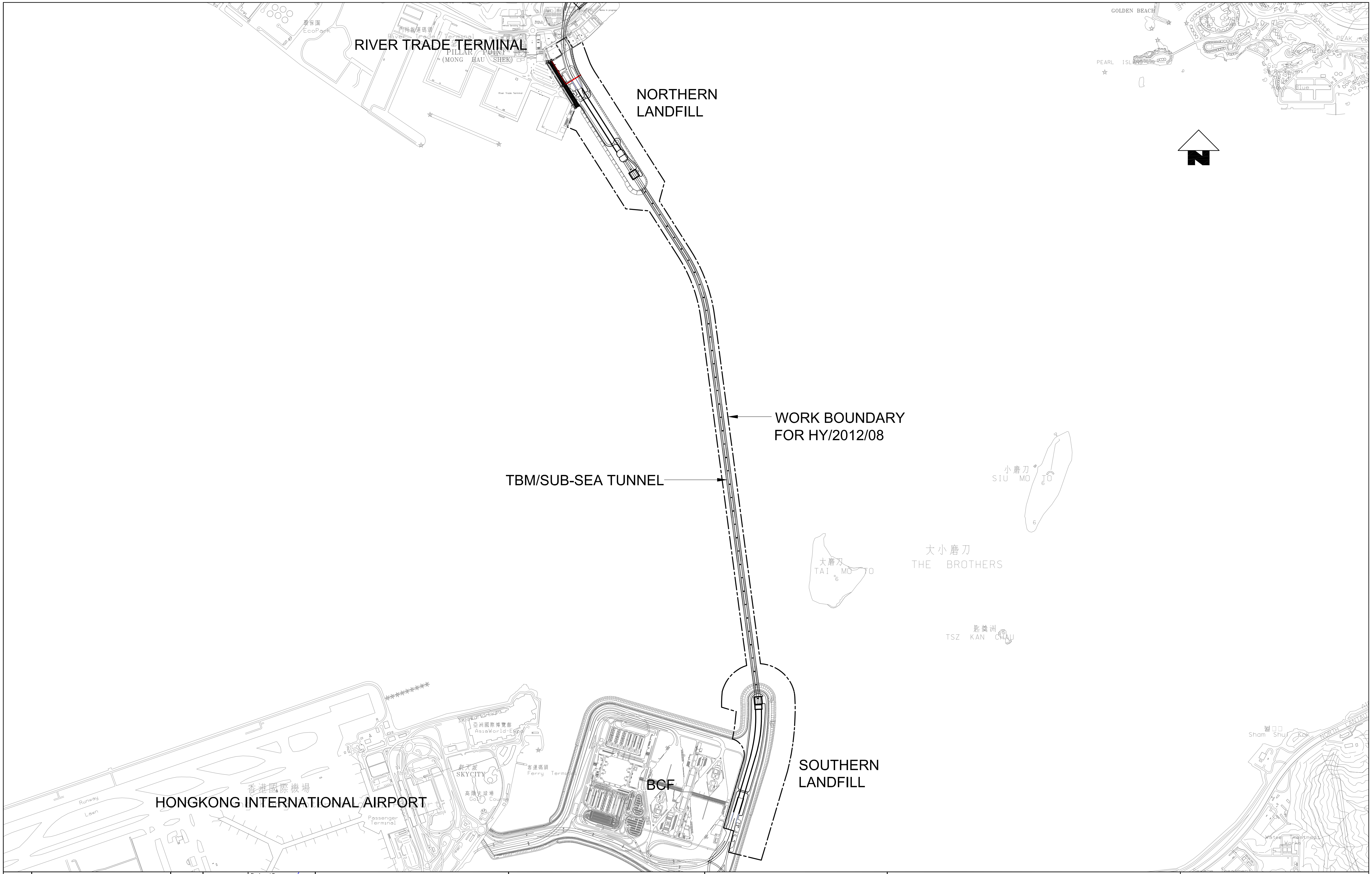
The general layout plan of the site showing the detailed works areas is shown in *Figure 1.2*.

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

1.5 SUMMARY OF EM&A PROGRAMME REQUIREMENTS

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

- Monitoring parameters;
- Monitoring schedules for the reporting month and forthcoming month;
- Action and Limit levels for all environmental parameters;
- Event and Action Plan;
- Results and observations;
- Environmental mitigation measures, as recommended in the Project EIA reports; and,
- Environmental requirement in contract documents.



Rev.	Description	Date	Checked
A	FIRST ISSUE	11SEP13	PKV

Designed By PKV
Drawn By DAI
Approved By SPo PP
Date 11SEP2013

Main Contractor
香港寶嘉 Dragages HongKong
A member of the Bouygues Construction group
BOUYGUES TRAVAUX PUBLICS
Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Client
路政署 HIGHWAYS DEPARTMENT

Contractor's Designer
ARUP 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 1.2

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

2 AIR QUALITY

2.1 MONITORING REQUIREMENTS

In accordance with the Updated EM&A Manual, baseline 1-hour and 24-hour TSP levels at five (5) air quality monitoring stations were established. Impact 1-hour TSP monitoring was conducted three (3) times every six (6) days while impact 24-hour TSP monitoring was carried out once every six (6) days while the highest dust impact was expected. The Action and Limit Levels of the air quality monitoring is provided in *Appendix D*.

2.2 MONITORING EQUIPMENT

High volume samplers (HVSs) were used to carry out the 1-hour and 24-hour TSP monitoring on 2, 7, 13, 19, 25 and 29 November 2013 at each designated monitoring station in accordance with the requirements stipulated in the Updated EM&A Manual. Details of the equipment deployed are provided in *Table 2.1*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

Wind data monitoring equipment was installed at the rooftop of ASR5 (Pillar Point Fire Station) for logging wind speed and wind direction such that the wind sensors are clear of obstructions or turbulence caused by building. The wind data monitoring equipment is recalibrated at least once every six months.

Table 2.1 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 Anemometer	MetPak, WindSonic

2.3 MONITORING LOCATIONS

Air quality monitoring stations ASR1 and ASR5 were set up at the proposed locations in accordance with the Updated EM&A Manual. Three additional monitoring stations, AQMS1, AQMS2 and ASR10 were also set up at the designated locations in accordance with the Enhanced TSP Monitoring Plan (1).

AQMS2 is an alternative monitoring station for Butterfly Laundry which is an Air Sensitive Receiver (ASR) (ie ASR6) identified in the approved EIA Report. AQMS2 is being proposed as a temporary alternative station for monitoring

---

(1) Enhanced TSP was submitted to EPD and subsequently confirmed on 1 Nov 2013

since access to Butterfly Laundry is not granted to the ET at the moment to undertake the air quality monitoring. Should access be granted to the ET, air quality monitoring will be conducted at ASR6 (Butterfly Laundry) instead of AQMS2 in the impact phase of air quality monitoring.

Figure 2.1 presents the locations of all air quality monitoring stations. *Table 2.2* describes the details of the monitoring stations.

Table 2.2 Locations of Impact Air Quality Monitoring Stations

Monitoring Station	Location	Monitoring Dates	Description
ASR1	Tuen Mun Fireboat Station	2, 7, 13, 19, 25 and 29 November 2013	Office
ASR5	Pillar Point Fire Station		Office
AQMS1	Previous River Trade Golf		Bare ground
AQMS2	Bare ground at Ho Suen Street		Bare ground
ASR10	Butterfly Beach Park		Recreational uses

2.4 *MONITORING PARAMETERS & FREQUENCY*

Table 2.3 summarized the monitoring parameters and frequency of impact air quality monitoring.

Table 2.3 Parameters and Monitoring Frequency of Air Quality Monitoring

Parameter	Frequency and Duration
1-hour TSP	Three times per day every six days while the highest dust impact was expected
24-hour TSP	Daily every six days

2.5 *MONITORING METHODOLOGY*

2.5.1 *High Volume Sampler*

(a) The HVS was installed in the vicinity of the air sensitive receivers. The following criteria were considered in the installation of the HVS:

- A horizontal platform with appropriate support to secure the sampler against gusty wind was provided.
- The distance between the HVS and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
- A minimum of 2m of separation from walls, parapets and penthouses was required for rooftop samples.
- A minimum of 2m separation from any supporting structure, measured horizontally was required.
- No furnaces or incineration flues were nearby.
- Airflow around the sampler was unrestricted.
- The samplers were more than 20m from the drip line.
- Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.

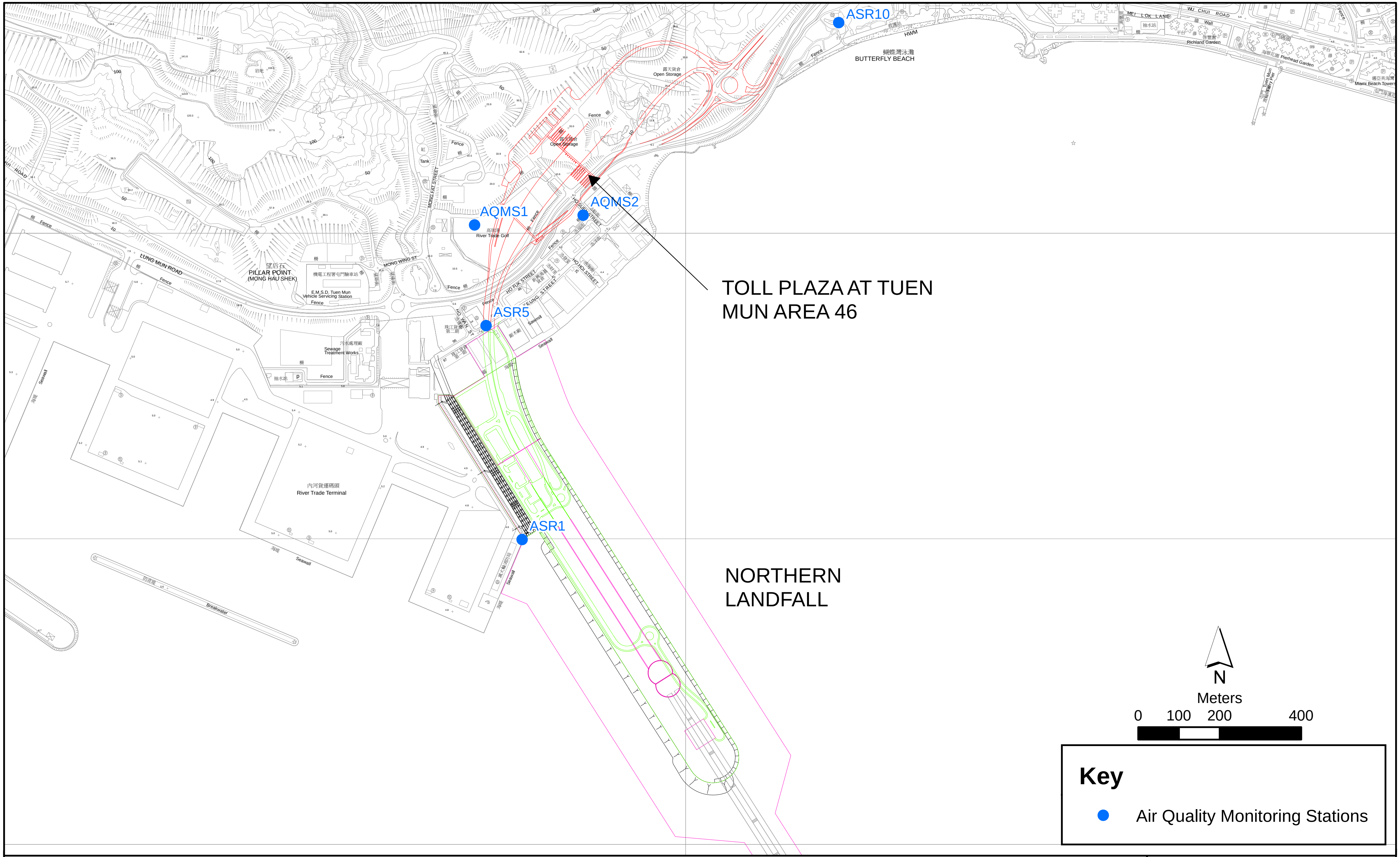


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring

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- Permission must be obtained to set up the samples and to obtain access to the monitoring stations.
- A secured supply of electricity is needed to operate the samplers.
- No two samplers should be placed less than 2 m apart.

(b) Preparation of Filter Papers

- Filter papers of size 8″x 10″ that were clean and without pinholes were selected.
- All filter papers were conditioned in a humidity controlled chamber for over 24-hour and be pre-weighed before use for sampling.
- All filter papers were prepared and analysed by ALS Technichem (HK) Pty Ltd., which is a HOKLAS accredited laboratory and has comprehensive quality assurance and quality control programmes.

(c) Field Monitoring

- The power supply was checked to ensure the HVS works properly.
- The filter holder and the area surrounding the filter were cleaned.
- The filter holder was removed by loosening the four bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully.
- The filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter.
- The swing bolts were fastened to hold the filter holder down to the frame. The pressure applied was sufficient to avoid air leakage at the edges.
- Then the shelter lid was closed and was secured with the aluminum strip.
- The HVS was warmed up for about 5 minutes to establish run-temperature conditions.
- A new flow rate record sheet was set into the flow recorder.
- On site temperature and atmospheric pressure readings were taken and the flow rate of the HVS was checked and adjusted at around 1.1 m^3/min, and complied with the range specified in the Updated EM&A Manual (i.e. 0.6 – 1.7 m^3/min).
- The programmable digital timer was set for a sampling period of 1 hour or 24 hours, and the starting time, weather condition and the filter number were recorded.
- The initial elapsed time was recorded.
- At the end of sampling, on site temperature and atmospheric pressure readings were taken and the final flow rate of the HVS was checked and recorded.
- The final elapsed time was recorded.

- The sampled filter was removed carefully and folded in half-length so that only surfaces with collected particulate matter were in contact.
- It was then placed in a clean plastic envelop and sealed.
- All monitoring information was recorded on a standard data sheet.
- Filters were then sent to ALS Technichem (HK) Pty Ltd. for analysis.

(d) Maintenance and Calibration

- The HVS and its accessories were maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.
- All HVS were calibrated (five point calibration) using Calibration Kit prior to the commencement of the baseline monitoring and thereafter at bi-monthly intervals.

2.6 *MONITORING SCHEDULE FOR THE REPORTING MONTH*

The schedule for air quality monitoring in November 2013 is provided in *Appendix F*.

2.7 *RESULTS AND OBSERVATIONS*

The monitoring results for 1-hour TSP and 24-hour TSP are summarized in *Tables 2.4* and *2.5,* respectively. Detail impact air quality monitoring results and graphical presentations are presented in *Appendix G*.

Table 2.4 Summary of 1-hour TSP Monitoring Results in this Reporting Period

	Average (µg/m³)	**Range (µg/m³)**	**Action Level (µg/m³)**	**Limit Level (µg/m³)**
ASR 1	180	69 – 363	331	500
ASR 5	231	85 – 413	340	500
AQMS1	161	81 - 431	335	500
AQMS2	189	69 - 332	338	500
ASR10	179	60 - 645	337	500

Table 2.5 Summary of 24-hour TSP Monitoring Results in this Reporting Period

	Average (µg/m³)	**Range (µg/m³)**	**Action Level (µg/m³)**	**Limit Level (µg/m³)**
ASR 1	112	82 – 143	213	260
ASR 5	145	100 – 189	238	260
AQMS1	123	69 – 197	213	260
AQMS2	141	99 – 174	238	260
ASR10	80	53 – 120	214	260

The major dust sources in the reporting period include construction activities under the Contract as well as nearby traffic emissions.

Exceedances of Action and Limit levels on 1-hr TSP were observed on 7 and 19 November 2013. Upon further investigation, the exceedances were considered not related to the construction works of this Contract after further investigation. Cumulative statistics of exceedances is presented in *Appendix L*.

The Event and Action plan is presented in *Appendix K*.

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

3 WATER QUALITY MONITORING

3.1 MONITORING REQUIREMENTS

Impact water quality monitoring was carried out three days per week during the construction period, and impact water quality monitoring measurements were taken according to the requirements stated in the Updated EM&A Manual of the Project. The Action and Limit Levels of the water quality monitoring is provided in *Appendix D*.

3.2 MONITORING EQUIPMENT

Table 3.1 summarises the equipment used in the impact water quality monitoring programme.

Table 3.3.1 Water Quality Monitoring Equipment

Equipment	**Model**	**Qty.**
Water Sampler	Kahlsico Water-Bottle Model 135DW 150	4
Multi-parameter Water Quality System	YSI 6820-C-M/YSI 6920	6
Dissolved Oxygen Meter	YSI Pro 2030	1
pH Meter	HANNA HI 8314	1
Turbidity Meter	HACH 2100Q	1
Monitoring Position Equipment	"Magellan" Handheld GPS Model eXplorist GC	4
	DGPS Koden KGP913MK2 (1)	1

3.3 MONITORING PARAMETERS, FREQUENCY AND DURATION

Table 3.2 summarized the monitoring parameters, frequency and duration of impact water quality monitoring.

Table 3.2 Water Quality Monitoring Parameters and Frequency

Monitoring Stations	**Parameters, unit**	**Depth**	**Frequency**
IS12 IS13 IS14 IS15 CS4 CS6 SR8 SR9 SR10A	• 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.

In addition to the parameters presented in *Table 3.3,* monitoring location/position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or works underway nearby were also recorded.

3.4 MONITORING LOCATIONS

The locations of the monitoring stations under the *Contract* are shown in *Figure 3.1* and detailed in *Table 3.3.*

Table 3.3 ***Locations of Water Quality Monitoring Stations***

Station ID	Type	Coordinates	
		Easting	Northing
IS12	Impact Station	813218	823681
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

3.5 MONITORING METHODOLOGY

3.5.1 *Instrumentation*

The *in-situ* water quality parameters, i.e. dissolved oxygen, temperature and salinity were measured by multi-parameter Water Quality System (Model YSI 6820-C-M/YSI 6920).

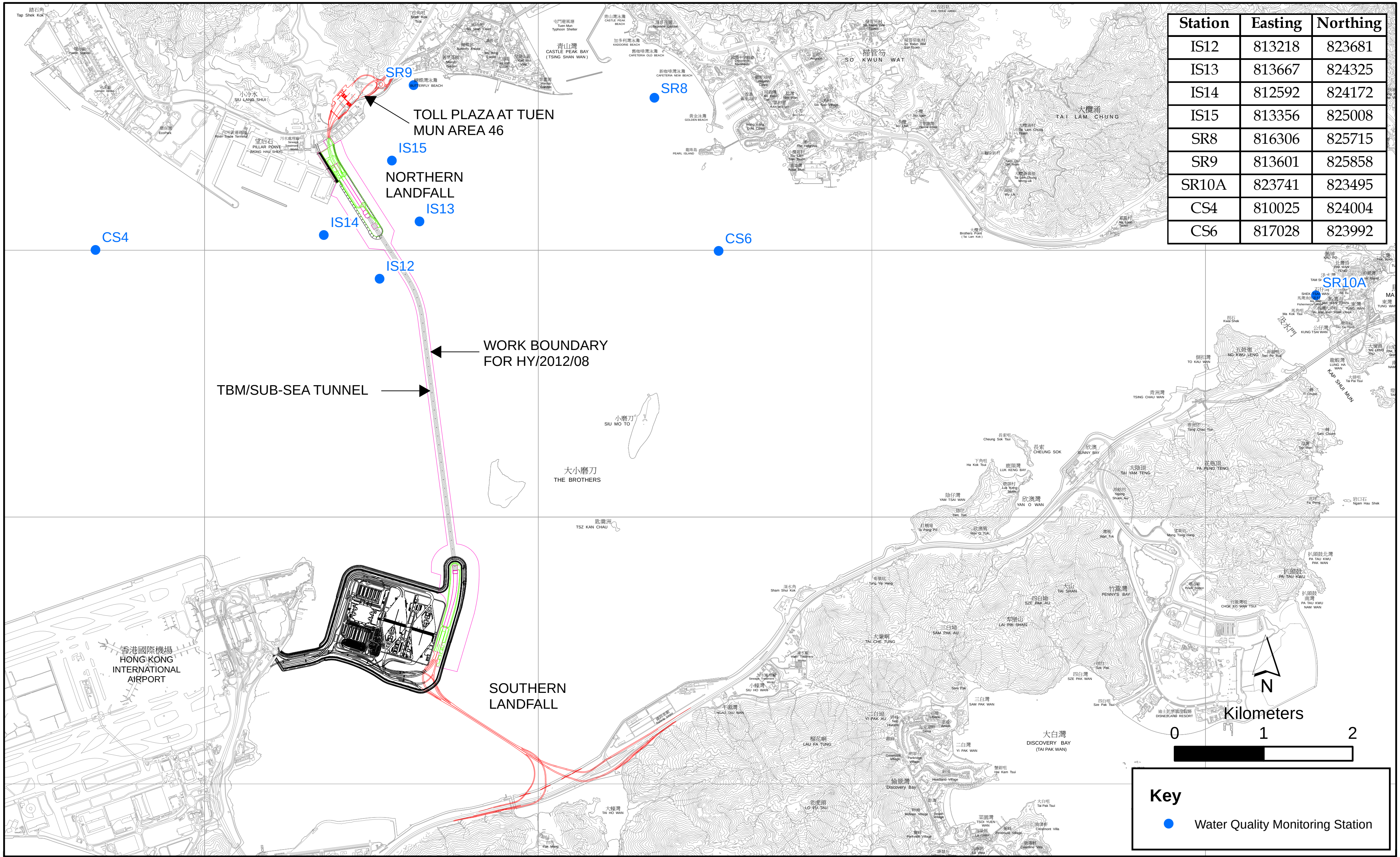
3.5.2 *Operating/ Analytical Procedures*

Digital Differential Global Positioning Systems (DGPS) were used to ensure that the correct location was selected prior to sample collection.

Portable, battery-operated echo sounders were used for the determination of water depth at each designated monitoring station.

All *in-situ* measurements were taken at 3 water depths, 1 m below water surface, mid-depth and 1 m above sea bed, except where the water depth was less than 6 m, for which the mid-depth station was omitted. Should the water depth be less than 3 m, only the mid-depth station was monitored.

At each measurement / sampling depth, two consecutive *in-situ* measurements (DO concentration and saturation, temperature, turbidity, pH and salinity) and water samples for SS were taken. The probes were retrieved out of the water after the first measurement and then re-deployed



Station	Easting	Northing
IS12	813218	823681
IS13	813667	824325
IS14	812592	824172
IS15	813356	825008
SR8	816306	825715
SR9	813601	825858
SR10A	823741	823495
CS4	810025	824004
CS6	817028	823992

Key

● Water Quality Monitoring Station

Figure 3.1

Water Quality Monitoring Station

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Date: 15/11/2013

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for the second measurement. Where the difference in the value between the first and second readings of DO or turbidity parameters was more than 25% of the value of the first reading, the reading was discarded and further readings were taken.

Duplicate samples were collected at each sampling depth for SS measurement in the laboratory. Water samples were collected using the water samplers and the samples were stored in high-density polythene bottles. Water samples collected were well-mixed in the water sampler prior to pre-rinsing and transferring to sample bottles. Samples bottles were pre-rinsed with the same water samples. The sample bottles were then packed in cool-boxes (cooled at 4° C) without being frozen) and delivered to ALS Technichem (HK) Pty Ltd. for the analysis of SS concentrations. The laboratory determination work would be started within 24 hours after collection of the water samples. ALS Technichem (HK) Pty Ltd. is a HOKLAS accredited laboratory and has comprehensive QA/QC programme. For QA/QC procedures, one sample of every batch of 20 samples was analyzed.

The analysis method and reporting and detection limit for SS is shown in *Table 3.4***.**

Table 3.4 Laboratory Analysis for Suspended Solids

Parameters	**Instrumentation**	**Analytical Method**	**Reporting Limit**	**Detection Limit**
Suspended Solid (SS)	Weighing	APHA 2540-D	0.5 mg/L	0.5 mg/L

Other relevant data were recorded, including monitoring location/ position, time, water depth, tidal stages, weather conditions and any special phenomena or work underway at the construction site in the field log sheet for information.

3.5.3 Maintenance and Calibration

All *in situ* monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring programme. Responses of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring event.

For the on-site calibration of field equipment (Multi-parameter Water Quality System), the BS 1427:2009, *Guide to on-site test methods for the analysis of waters* was observed. Copies of the calibration certificates are attached in *Appendix E*.

3.6 *ACTION & LIMIT LEVELS*

The Action and Limit Levels for water quality monitoring are summarized in *Table 3.5*.

Table 3.5 Action Limit Levels for Water Quality Monitoring

Parameter	Action Level#	Limit Level#
DO in mg/L [(a)]	Surface and Middle **5.0 mg/L** Bottom **4.7 mg/L**	Surface and Middle **4.2 mg/L** Bottom **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.

Should non-compliance of the criteria occur, action in accordance with the Event and Action Plan, as provided in *Appendix K* should be carried out.

3.7 *MONITORING SCHEDULE FOR THE REPORTING MONTH*

The schedule for water quality monitoring in November 2013 is provided in *Appendix F*.

3.8 *RESULTS AND OBSERVATIONS*

Impact water quality monitoring was conducted at all designated monitoring stations in the reporting month. Detailed impact water quality monitoring results are presented in *Appendix G*.

No exceedances of Action and Limit levels were recorded for water quality monitoring in the reporting month.

4 DOLPHIN MONITORING

4.1 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. Dolphin monitoring works by line transect methodology is required to carry out in accordance with the Updated EM&A Manual of the TM-CLK Link Project. 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.

4.2 MONITORING EQUIPMENT

Table 4.1 summarises the equipment used for the impact dolphin monitoring.

Table 4.1 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 Binoculars	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

4.3 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.

4.4 *Monitoring Location*

The impact dolphin monitoring was carried out in the NEL and NWL along the line transect as depicted in *Figure 4.1*. The co-ordinates of all transect lines are shown in *Table 4.2* below.

Table 4.2 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				

4.5 *Action & Limit Levels*

The action and limit levels of dolphin impact monitoring are shown in *Tables 4.3 & 4.4*.

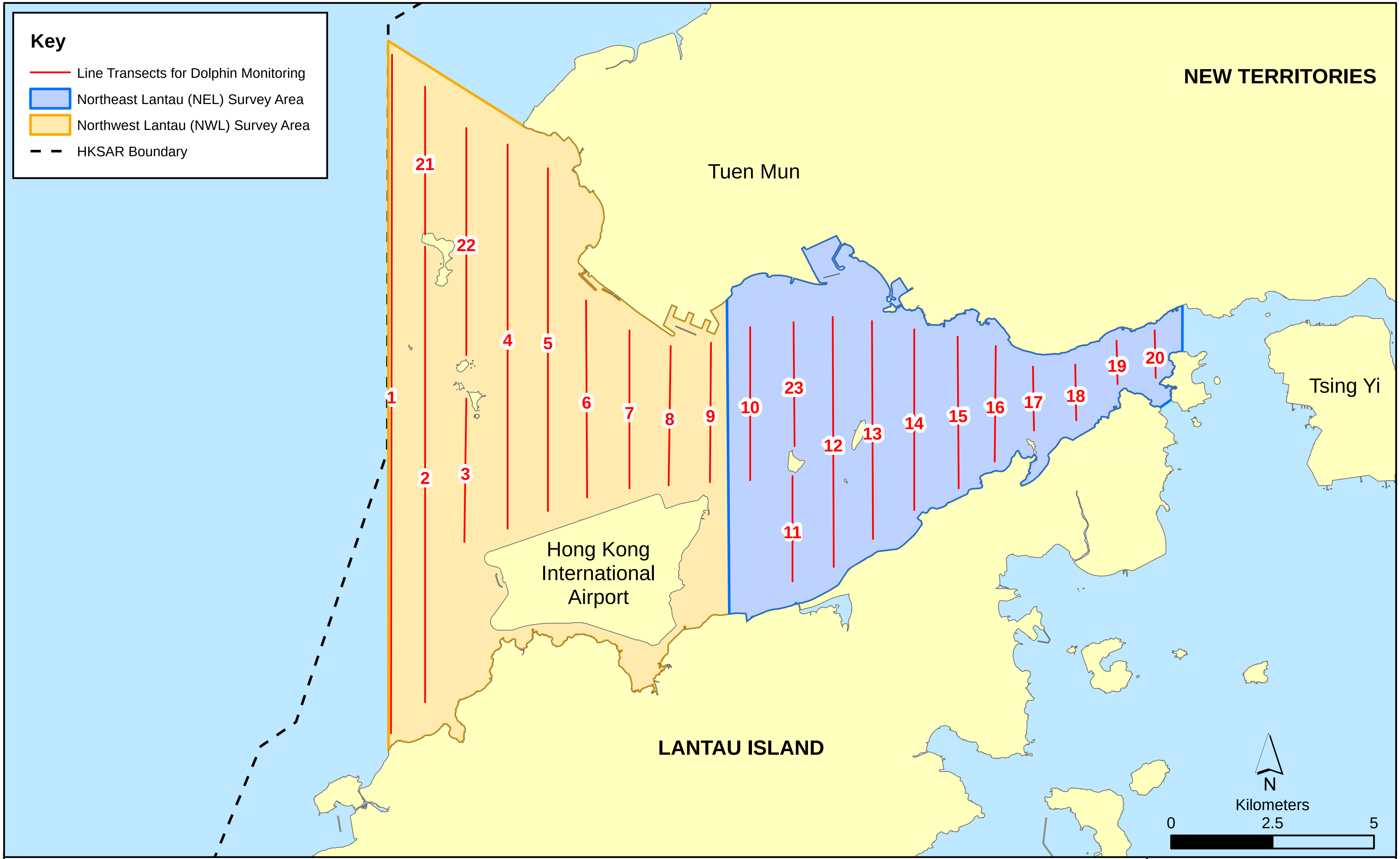

Figure 4.1

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

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Date: 29/11/2013

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Table 4.3 *Action Level and Limit Level for Dolphin Impact 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 4.4 *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	[STG < 2.4 & ANI <8.9] and [STG < 3.9 & ANI <17.9]	

4.6 *MONITORING SCHEDULE FOR THE REPORTING MONTH*

Dolphin monitoring was carried out on 1, 5, 8 and 13 November 2013. The dolphin monitoring schedule for the reporting period is shown in *Appendix F*.

4.7 *RESULTS & OBSERVATIONS*

A total of 268.17 km of survey effort was collected, with 100% of the total survey effort being conducted under favourable weather conditions (ie Beaufort Sea State 3 or below with good visibility) in November 2013. Amongst the two areas, 98.97 km and 169.20 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 211.85 km and 56.32 km, respectively. The survey efforts are summarized in *Appendix J*.

A total of twenty-one dolphin sightings were recorded during the two surveys. All sightings were made in NWL during the two sets of surveys in November, with no sightings made at all in NEL.

None of the 21 sightings was made in the proximity of this Project. The distribution of dolphin sightings during the reporting month is shown in *Figure 4.2*.

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) in November 2013 with the results present in *Tables 4.5* and *4.6*.

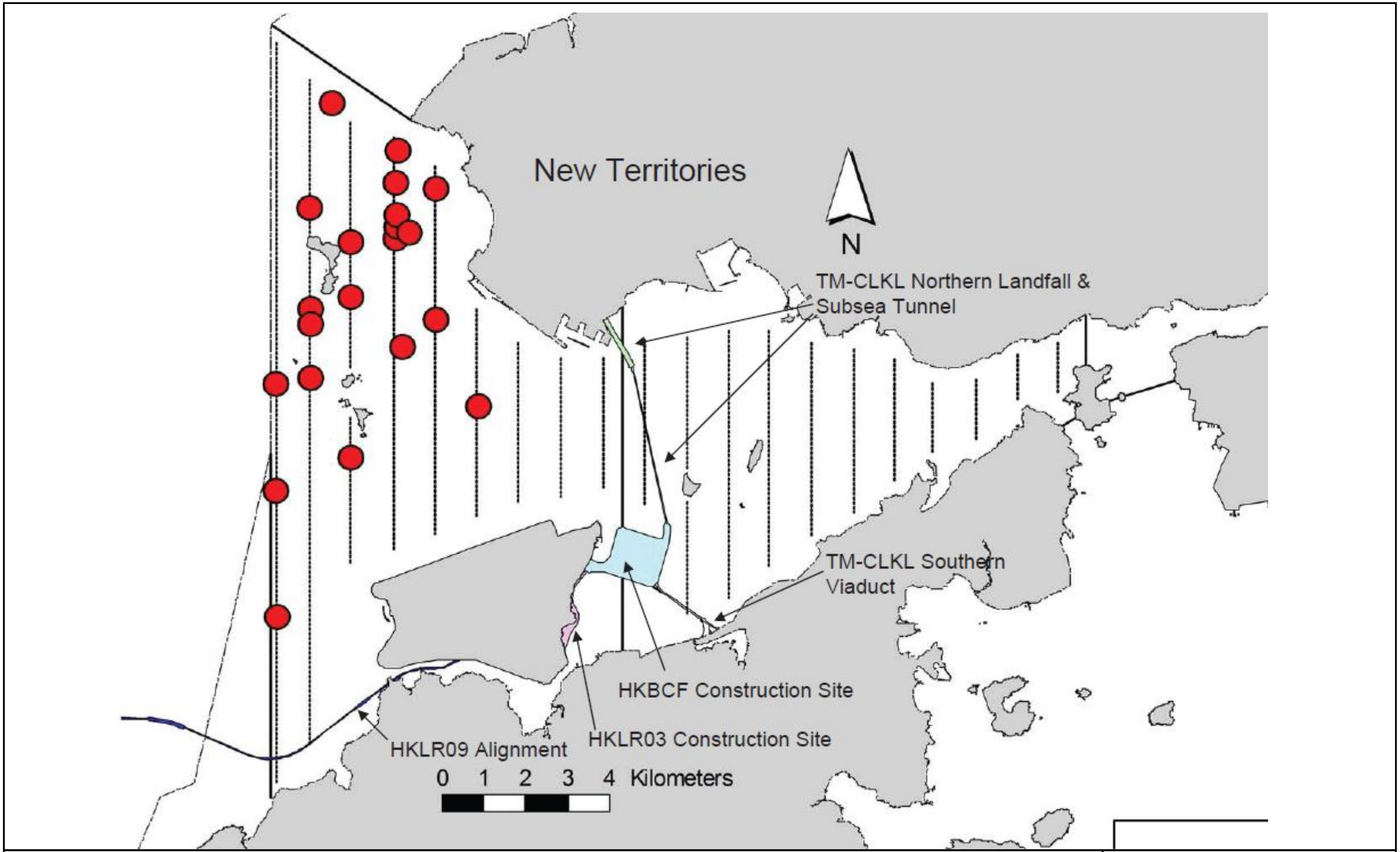

Figure 4.2

DATE: 06/03/2013

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 2013)

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Table 4.5 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: Nov 1st/5th	0.0	0.0
	Set 2: Nov 8th/13th	0.0	0.0
NWL	Set 1: Nov 1st/5th	10.3	50.0
	Set 2: Nov 8th/13th	16.1	76.1

Note: Dolphin Encounter Rates are deduced from the Two Sets of Surveys (Two Surveys in Each Set) in November 2013 in Northeast (NEL) and Northwest Lantau (NWL)

Table 4.6 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	13.2	11.2	63.1	53.2

Note: Overall dolphin encounter rates (sightings per 100km of survey effort) from all four surveys are conducted in November 2013 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 2013 was 4.86 individuals per group. Twelve dolphin groups were composed of only 1-4 animals, while the other nine were larger groups with 5-11 animals per group.

During this month of dolphin monitoring, no adverse impact from the construction activities of this Project was recorded from the general observations.

Due to monthly variation in dolphin occurrence within the survey area, it would be more appropriate to draw conclusion on whether any 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.

Taking into account of natural seasonal change in distribution patterns, which is also observed in baseline monitoring, it is suggested that a longer period of impact monitoring data should be obtained for comparison.

The Event and Action plan is presented in *Appendix K*.

4.7.2 *Marine Mammal Exclusion Zone Monitoring*

Daily 250 m marine mammal exclusion zone monitoring was undertaken during the period of dredging activities being undertaken. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* were recorded in November 2013 during the exclusion zone monitoring.

5 ENVIRONMENTAL SITE INSPECTION AND AUDIT

5.1 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, 20 and 27 November 2013.

Particular observations during the site inspections are described below:

Air Quality

The Contractor was reminded to cover the temporary stockpiles at site WA 23 properly when piling is completed.

Noise

No adverse observation was identified in the reporting month.

Water Quality

At site WA 23, residual sandy materials was found leaving at the edge of loading area which may lead to surface runoff in the vicinity.

At site WA 18, sandy materials were observed near the drainage area.

Sediment flow was observed outside the cage-type silt curtain in the dredging site of barge GD1.

Marine Ecology

Pre-translocation survey at Yam Tsai Wan was conducted on 19 October 2013 and the subsequent coral translocation and audit survey was carried out at Pillar Point and Yam Tsai Wan between 21 and 23 October 2013. The post-translocation monitoring is scheduled in January 2014.

Daily 250 m marine mammal exclusion zone monitoring was undertaken during the period of dredging activities being undertaken. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* were recorded in November 2013 during the exclusion zone monitoring. In addition, acoustic decoupling monitoring and marine vessel control for dredging works were implemented in this reporting month.

Chemical and Waste Management

At site WA 18, drip tray stopper was found missing and stagnant of water was found in the drip tray.

At site WA 18, several oil drums were observed without chemical labels.

Oil stain was observed on the barge (Dredging barge GD-1).

Drip tray should be provided for the chemical containers (Dredging barge GD-1)

Landscape and Visual Impact

No adverse observation was identified in the reporting month.

Miscellaneous

The Environmental Permit should be displayed conspicuously in the site entrance (Site WA 23).

The Contractor has rectified most of the observations as identified during environmental site inspection in the reporting month. Rectifications of remaining identified items are undertaken by the Contractor. Follow-up inspections on the status on provision of mitigation measures will be conducted to ensure all identified items are mitigated properly.

5.2 *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.

As advised by the Contractor, 2,835 tonnes of inert C&D Materials are generated and disposed of as public fill in the reporting period. 21,100m^3 of marine sediment (Catergory L) and 13,200m^3 of marine sediment (Catergory M) are generated and disposed of at designated sites. Monthly summary of waste flow table is detailed in *Appendix M*.

The Contractor is 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 is reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

The Contractor is reminded that chemical waste containers should be properly treated and stored 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.

5.3 *ENVIRONMENTAL LICENSES AND PERMITS*

The status of environmental licensing and permit is summarized in *Table 5.1* below.

Table 5.1 Summary of Environmental Licensing and Permit Status

Statutory Reference	License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
EIAO	Environmental Permit	EP-354/2009/A	8 Dec 2010	NA	HyD	Tuen Mun- Chek Lap Kok Link
NCO	Construction Dust Notification	363510	19 Aug 2013	NA	DBJV	-
WDO	Chemical Waste Registration	5213-422-D2516-01	10 Sep 2013	NA	DBJV	
WDO	Construction Waste Disposal Account	7018108	19 Aug 2013	NA	DBJV	Waste disposal in Contract HY/2012/08
WPCO	Waste Water Discharge License	Nil	18 Nov 2013	30 Nov 2018	DBJV	Discharge of Construction Runoff
NCO	Construction Noise Permit	GW-RW0691-13	15 Oct 2013	14 Apr 2014	DBJV	For Dredging and Reclamation Works
NCO	Construction Noise Permit	GW-RW0822-13	14 Nov 2013	10 May 2014	DBJV	For works in site WA18
NCO	Construction Noise Permit	GW-RS0814-13	15 Nov 2013	10 May 2014	DBJV	For works in site WA23
DASO	Marine Dumping Permit	EP/MD/14-072	1 Nov 2013	30 Apr 2014	DBJV	For Type 1
DASO	Marine Dumping Permit	EP/MD/14-071	1 Dec 2013	31 Dec 2013	DBJV	For Type 1 (Dedicated site) and Type 2

5.4 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

In response to the site audit findings, the Contractors carried out 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 Project were implemented properly.

5.5 SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT

Results for water quality monitoring complied with the Action/ Limit levels in the reporting period. No exceedances of Action and Limit levels were recorded for water quality monitoring during the reporting month. Four exceedances of Action level and one exceedance of Limit Level for 1-hour TSP of air quality were recorded during the reporting month. The exceedances were considered not related to the construction works of this Contract after further investigation.

Cumulative statistics on exceedances is provided in *Appendix L*.

5.6 SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

The Environmental Complaint Handling Procedure is provided in *Figure 5.1*.

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

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

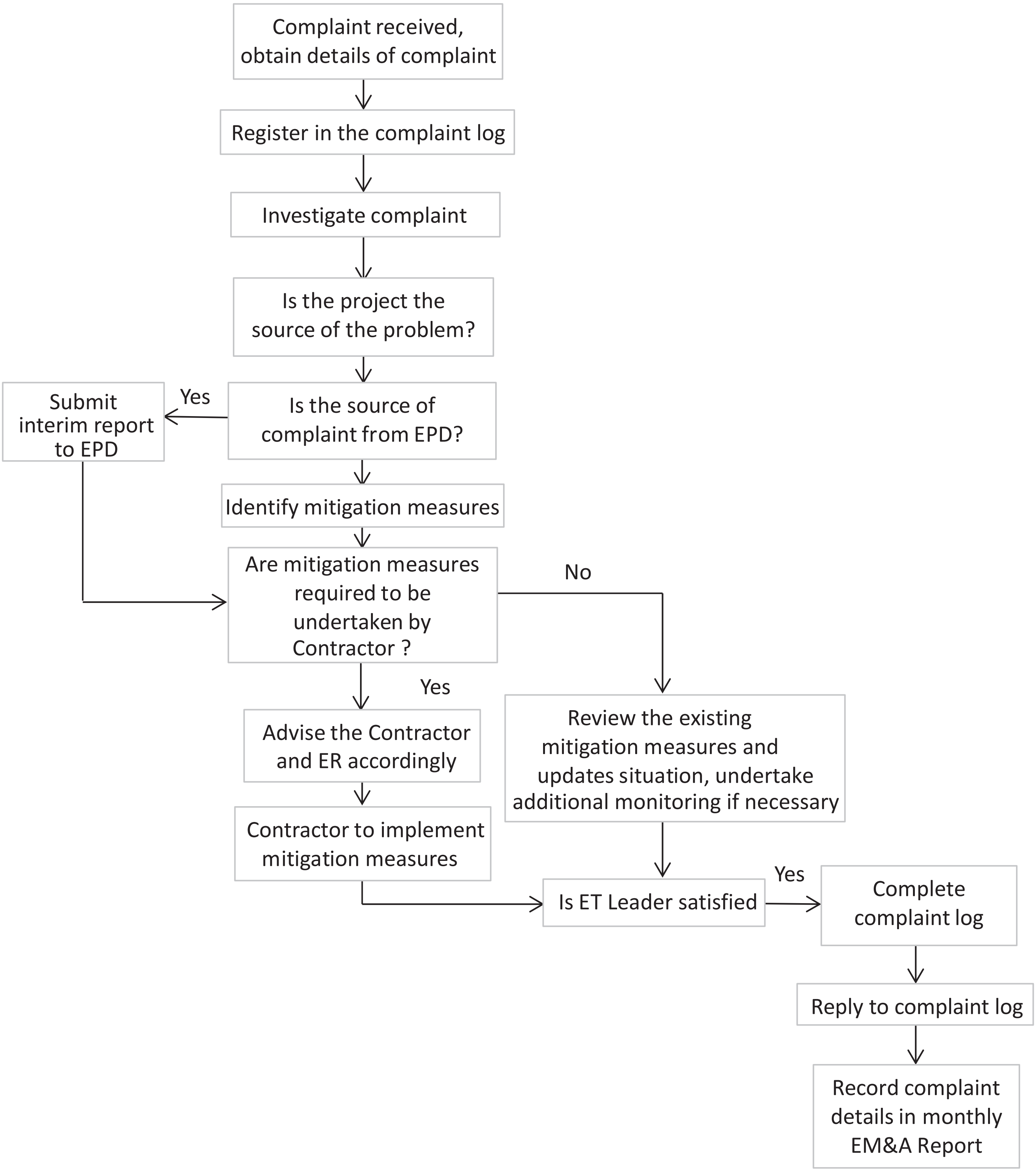

Figure 5.1

Environmental Complaint Handling Procedure

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6 FUTURE KEY ISSUES

6.1 CONSTRUCTION PROGRAMME FOR THE COMING MONTHS

As informed by the Contractor, the major works for the Project in December 2013 will be:

Marine-based Works

- Seawall construction;
- Removal of existing seawall armour rock;
- Temporary seawall;
- Additional Ground investigation;
- Reclamation; and
- Temporary pontoon installation at RTT.

Land-based Works

- Pre-csonstruction for site office (WA 18);
- Hoarding erection & building demolition (Portion N6); and
- CLP substation construction.

6.2 KEY ISSUES FOR THE COMING MONTH

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of December 2013 are mainly associated with dust, marine water quality, marine ecology and waste management issues.

6.3 MONITORING SCHEDULE FOR THE COMING MONTH

The tentative schedule for environmental monitoring in December 2013 is provided in *Appendix F*.

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

The construction phase of the TM-CLKL Northern Connection Sub-sea Tunnel Section and the associated impact phase EM&A programme commenced on 1 November 2013.

1-hour TSP, 24-hour TSP, water quality and dolphin monitoring were carried out in the reporting period.

The monitoring results generally complied with the Action/ Limit levels in the reporting period, except that four exceedances of Action level and one exceedance of Limit Level for air quality were recorded. The exceedances were considered not related to the construction works of this Contract after further investigation.

A total of twenty-one dolphin s sighting were recorded during the two surveys. All sightings were made in NWL during the two sets of surveys with no sightings made at all in NEL in November 2013. None of the 21 sightings was made in the proximity of the TM-CLKL Northern Connection Sub-sea Tunnel Section. During this month of dolphin monitoring, no adverse impact from the construction activities of the TM-CLKL Northern Connection Sub-sea Tunnel Section on Chinese White Dolphins was noticeable from general observations.

Environmental site inspection was carried out four (4) times in November 2013. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audits.

Four (4) Action Level and one (1) Limit Level exceedances for 1-hour TSP of during air quality monitoring were recorded in the reporting month. Investigation works show that the exceedance was not due to the Project works. Nevertheless, the Contractor was reminded to ensure all dust mitigation measures are provided at the construction site.

7.2 RECOMMENDATIONS

According to the environmental site inspections performed in the reporting month, the following recommendations were provided:

Air Quality

Temporary stockpiles at the works area should be properly covered by the Contactor when piling is completed.

Water Quality

Measures should be undertaken by the Contractor to avoid residual sandy materials leaving from at the edge of loading area which may lead to surface runoff in the vicinity.

The Contractor should avoid sandy materials from entering the drainage area.

The Contractor should ensure that the dredging is undertaken properly to avoid spillage outside the cage-type silt curtain in the dredging site of barge GD1.

Chemical and Waste Management

The Contractor should install drip tray stopper and clear water stagnant in the drip tray.

The Contractor should proper label the oil drums.

The Contractor should clear oil stain on the barge.

Drip tray should be provided by the Contractor for the chemical containers

Marine Mammal Exclusion Zone Monitoring

Daily 250 m marine mammal exclusion zone monitoring was undertaken during the period of dredging activities being undertaken. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* were recorded in November 2013 during the exclusion zone monitoring.

Miscellaneous

The Environmental Permit should be displayed conspicuously in the site entrance by the Contractor.

Appendix A

Project Organization for Environmental Works

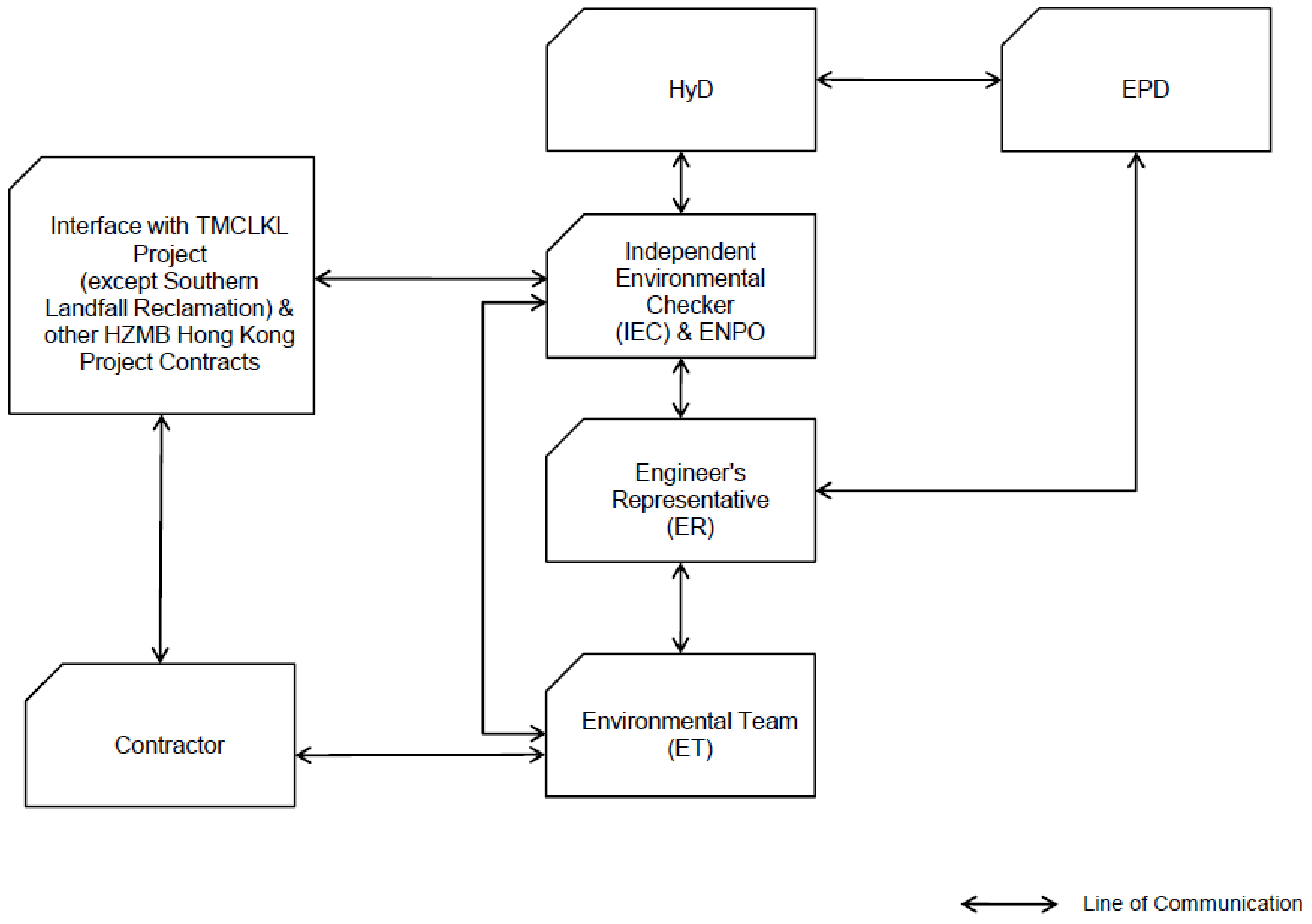

Figure 1.1

Contract No. HY/2012/08 TM-CLKL Northern Connection Sub-sea Tunnel Section
Project Organization

DATE: 06/03/2013

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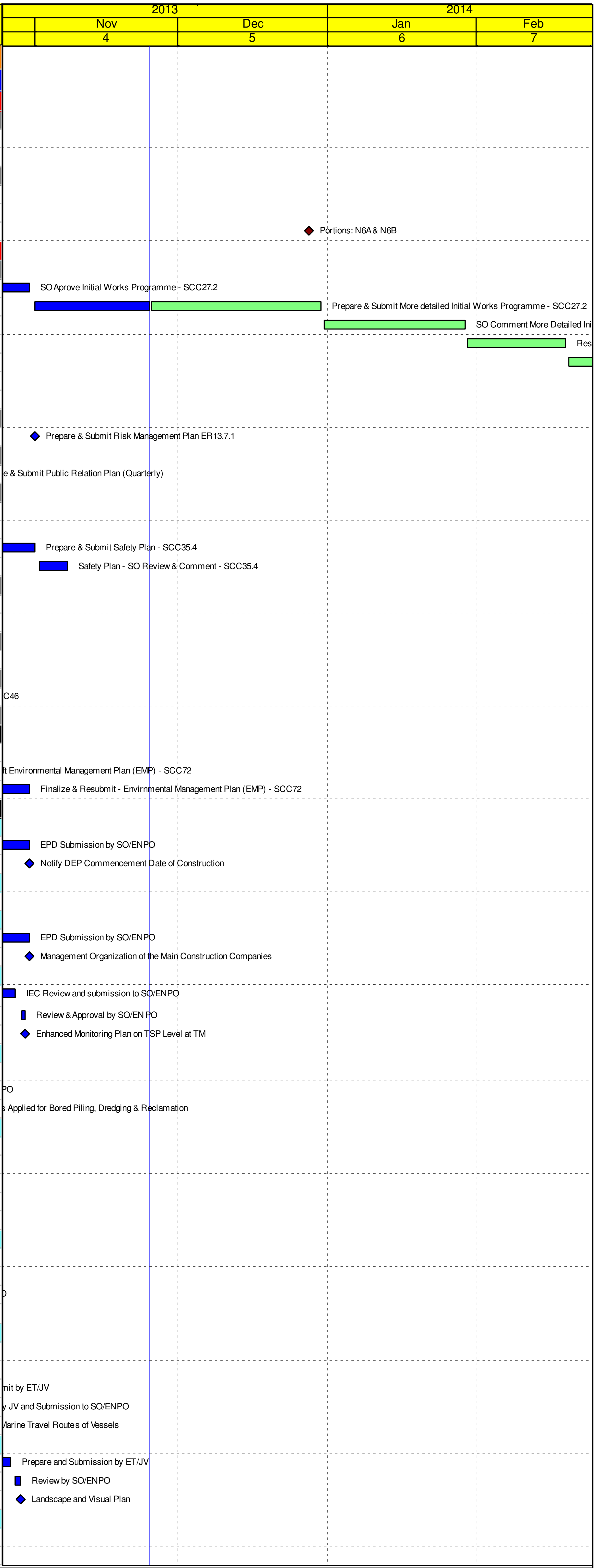
Appendix B

Three-Month Rolling Construction Programme

TMCLK - Northern Connection Sub-Sea Tunnel Section

Activity ID	Activity Name	Original Duration	Start	Finish
Preliminaries				
Contract Dates				
Commencement and Completion Dates				
KD001	Letter of Acceptance Received	0d		26-Jul-13 A
KD005	Date for Commencement	0d	05-Aug-13 A	
Site Possession Date				
AD010	Portions: X, N5, N7,(N8A,B&C), N9,(N12-seabed level & below) & WA23	0d	05-Aug-13 A	
AD020	Portions: WA18 - Zone 18A (SO Office), Zone 18B & 18C	0d	05-Aug-13 A	
AD030	Portions: N6A & N6B	0d	28-Dec-13*	
General Submissions				
Programme				
SCC0273	SO Aprove Initial Works Programme - SCC27.2	30d	11-Oct-13 A	31-Oct-13 A
SCC0274	Prepare & Submit More detailed Initial Works Programme - SCC27.2	60d	01-Nov-13 A	30-Dec-13
SCC0275	SO Comment More Detailed Initial Works Programme - SCC27.2	30d	31-Dec-13	29-Jan-14
SCC0276	Resubmit Detailed Works Programme - SCC27.2	21d	30-Jan-14	19-Feb-14
SCC0277	Detailed Works Programme - SCC27.2 - Approval by SO	30d	20-Feb-14	21-Mar-14
SCC0278	Prepare & Submit 1st 3 Months Rolling Programme - SCC27.2	14d	27-Jul-13 A	09-Aug-13 A
SCC0288	Prepare & Submit 1st Monthly Progress Report	0d		13-Sep-13 A
Risk Management				
A65030	Prepare & Submit Risk Management Plan ER13.7.1	0d		01-Nov-13 A
Public Relations				
A64950	Prepare & Submit Public Relation Plan (Quarterly)	56d	26-Jul-13 A	18-Oct-13 A
Safety				
SCC035	Prepare & Submit Draft Safety Plan - SCC35.2	14d	27-Jul-13 A	09-Aug-13 A
SCC0351	Arrange Adhoc Safety Meeting - SCC35.3	7d	10-Aug-13 A	16-Aug-13 A
SCC0352	Prepare & Submit Safety Plan - SCC35.4	35d	27-Jul-13 A	01-Nov-13 A
SCC0353	Safety Plan - SO Review & Comment - SCC35.4	28d	02-Nov-13 A	08-Nov-13 A
Quality				
A65000	Prepare for Project Management Plan	28d	27-Jul-13 A	23-Aug-13 A
A65010	Submit to SO - Project Management Plan	0d	24-Aug-13 A	
Contractor Organization				
SCC82	Prepare & Submit Details of Contractor's Management Team - SCC82	14d	05-Aug-13 A	18-Aug-13 A
Subcontractor Management				
SCC046	Prepare & Submit Sub-contractor Management Plan (SMP) - SCC46	30d	27-Jul-13 A	04-Sep-13 A
Environmental				
Submission Required under SCC				
SCC072	Prepare & Submit draft Environmental Management Plan (EMP) - SCC72	21d	27-Jul-13 A	16-Aug-13 A
SCC0721	SO Review & Comment - Draft Environmental Management Plan (EMP) - SCC72	15d	17-Aug-13 A	30-Sep-13 A
SCC0722	Finalize & Resubmit - Envirnmental Management Plan (EMP) - SCC72	7d	01-Oct-13 A	31-Oct-13 A
Environmental Permit Submissions				
Notify DEP Commencement Date of Constuction - EP1.11				
EP0020	EPD Submission by SO/ENPO	7d	04-Sep-13 A	31-Oct-13 A
EP1010	Notify DEP Commencement Date of Construction	0d		31-Oct-13 A
Establish ET - EP2.1				
EP1110	Establish Environmental Team (ET)	0d		05-Aug-13 A
Management Organization of the MC - EP2.3				
EP1220	EPD Submission by SO/ENPO	14d	06-Sep-13 A	31-Oct-13 A
EP1310	Management Organization of the Main Construction Companies	0d		31-Oct-13 A
Enhanced Monitoring Plan on TSP Level at TM - EP2.4				
EP1359	IEC Review and submission to SO/ENPO	3d	25-Sep-13 A	28-Oct-13 A
EP1360	Review & Approval by SO/EN PO	14d	29-Oct-13 A	30-Oct-13 A
EP1410	Enhanced Monitoring Plan on TSP Level at TM	0d		30-Oct-13 A
Acoustic Decoupling Measures Applied for Bored Piling, Dredging & Reclamation - EP2.5				
EP1460	Prepare Submission by JV	6d	30-Aug-13 A	21-Sep-13 A
EP1470	Review & Approval by SO/EN PO	14d	22-Sep-13 A	30-Sep-13 A
EP1510	Acoustic Decoupling Measures Applied for Bored Piling, Dredging & Reclamation	0d		30-Sep-13 A
Detailed Coral Translocation Methodology - EP2.6				
EP1630	Review by JV and Submission to IEC	12d	23-Aug-13 A	29-Aug-13 A
EP1632	Comment by IEC	7d	30-Aug-13 A	30-Aug-13 A
EP1634	Resubmit by JV/ET	6d	31-Aug-13 A	26-Sep-13 A
EP1636	Review & Approval by SO/EN PO	7d	27-Sep-13 A	27-Sep-13 A
EP1640	Coral Translocation Methodology	0d		27-Sep-13 A
Spill Response Plan - EP2.7				
EP1722	Comment by IEC	6d	03-Sep-13 A	04-Sep-13 A
EP1724	Prepare and Resubmit by ET/JV	6d	05-Sep-13 A	24-Sep-13 A
EP1730	Review and Approval by SO/ENPO	12d	25-Sep-13 A	27-Sep-13 A
EP1740	Spill Response Plan	0d		27-Sep-13 A
Regular Marine Travel Routes of Vessels - EP2.8				
EP1830	Prepare for Submission by Marine Traffic Consultant	12d	05-Aug-13 A	17-Aug-13 A
EP1832	Comment by IEC	7d	18-Aug-13 A	30-Aug-13 A
EP1834	Prepare and Resubmit by ET/JV	6d	31-Aug-13 A	08-Oct-13 A
EP1840	Review by JV and Submission to SO/ENPO	12d	09-Oct-13 A	16-Oct-13 A
EP1850	Regular Marine Travel Routes of Vessels	0d		16-Oct-13 A
Landscape and Visual Plan - EP2.9				
EP1860	Prepare and Submission by ET/JV	24d	05-Aug-13 A	27-Oct-13 A
EP1870	Review by SO/ENPO	14d	28-Oct-13 A	29-Oct-13 A
EP1880	Landscape and Visual Plan	0d		29-Oct-13 A
Waste Management Plan - EP2.10				
EP2020	Prepare and Submission by JV/ET	24d	05-Aug-13 A	29-Aug-13 A
EP2022	Comment from IEC	7d	30-Aug-13 A	30-Aug-13 A



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- 🟩 Planned Bar
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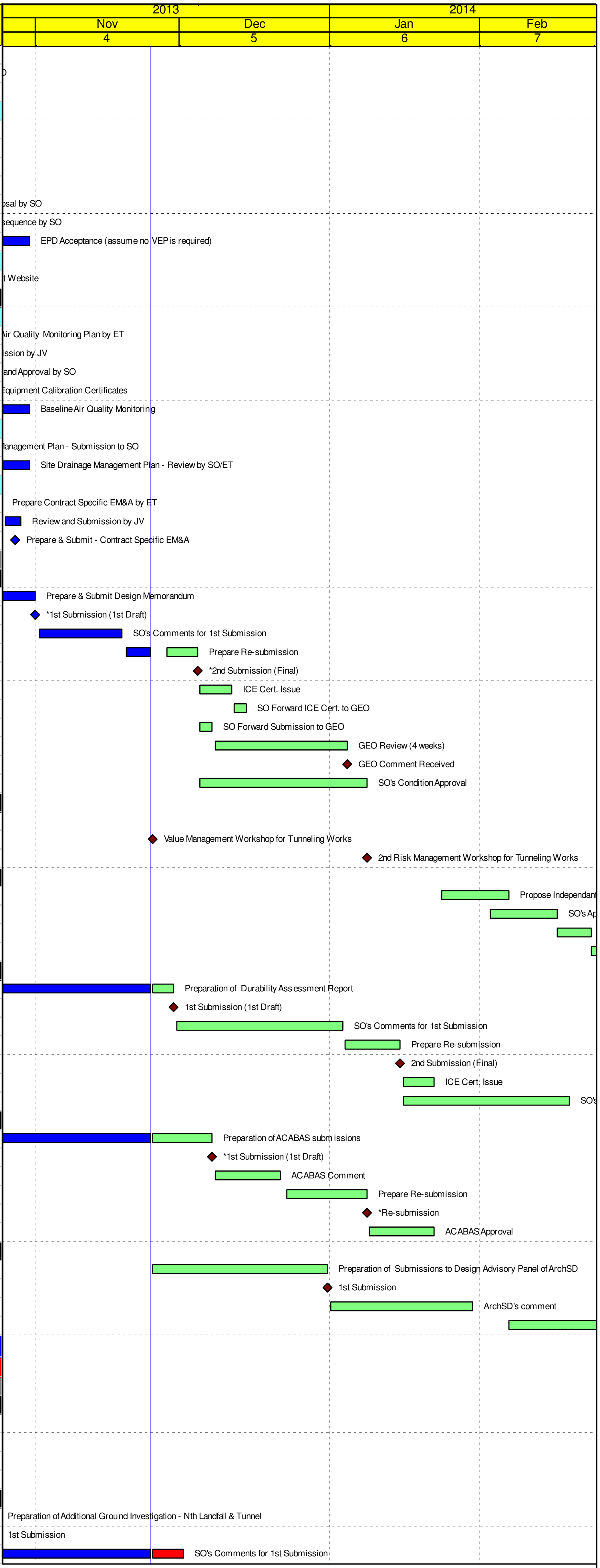
TMCLK - Northern Connection Sub-Sea Tunnel Section

Three-months Rolling Programme

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Date	Revision	Checked	Approved

Activity ID	Activity Name	Original Duration	Start	Finish
EP2024	Prepare and Resubmit by ET/JV	6d	31-Aug-13 A	21-Sep-13 A
EP2030	Review and Approval by SO/ENPO	14d	22-Sep-13 A	27-Sep-13 A
EP2040	Waste Management Plan	0d		27-Sep-13 A
Clarification/Notification for Resequenced Nth Reclamation				
A64900	Prepare Resequence MS and dwgs for ET Study	24d	05-Aug-13 A	26-Aug-13 A
A64910	Prepare Notification / Presentation by ET	14d	27-Aug-13 A	30-Aug-13 A
A64915	Comment by IEC	7d	31-Aug-13 A	04-Sep-13 A
A64917	Prepare and resubmit by ET/JV	6d	05-Sep-13 A	25-Sep-13 A
A64920	Review Resequence Proposal by SO	14d	26-Sep-13 A	03-Oct-13 A
A64930	Notification to EPD for Resequence by SO	0d	03-Oct-13 A	
A64940	EPD Acceptance (assume no VEP is required)	14d	04-Oct-13 A	31-Oct-13 A
Internet Website				
EP2610	Internet Website	0d		18-Oct-13 A
EM&A Submissions				
Baseline Air Quality Monitoring - EM&A 3.5.1.1				
EP1125	Prepare Baseline Air Quality Monitoring Plan by ET	18d	05-Aug-13 A	09-Oct-13 A
EP1135	Review and Submission by JV	12d	09-Oct-13 A	09-Oct-13 A
EP1145	Review and Approval by SO	14d	10-Oct-13 A	17-Oct-13 A
EP1155	Valid Equipment Calibration Certificates	0d	18-Oct-13 A	
EP1160	Baseline Air Quality Monitoring	14d	18-Oct-13 A	31-Oct-13 A
Site Drainage Management Plan - EM&A 5.2.1.2				
EP1420	Site Drainage Management Plan - Submission to SO	0d		11-Oct-13 A
EP1430	Site Drainage Management Plan - Review by SO/ET	10d	12-Oct-13 A	31-Oct-13 A
Updated Environmental Management and Audit Plan (EM&A)				
EP2760	Prepare Contract Specific EM&A by ET	12d	05-Aug-13 A	25-Oct-13 A
EP2810	Review and Submission by JV	15d	26-Oct-13 A	29-Oct-13 A
EP2820	Prepare & Submit - Contract Specific EM&A	0d		28-Oct-13 A
Design Submission Required under ER				
Design Memorandum (A3)				
GS00100	Prepare & Submit Design Memorandum	44d	08-Aug-13 A	01-Nov-13 A
GS00110	*1st Submission (1st Draft)	0d		01-Nov-13 A
GS00120	SO's Comments for 1st Submission	35d	02-Nov-13 A	19-Nov-13 A
GS00130	Prepare Re-submission	10d	20-Nov-13 A	04-Dec-13
GS00140	*2nd Submission (Final)	0d		04-Dec-13
GS00150	ICE Cert. Issue	6d	05-Dec-13	11-Dec-13
GS00160	SO Forward ICE Cert. to GEO	3d	12-Dec-13	14-Dec-13
GS00170	SO Forward Submission to GEO	3d	05-Dec-13	07-Dec-13
GS00180	GEO Review (4 weeks)	28d	08-Dec-13	04-Jan-14
GS00190	GEO Comment Received	0d		04-Jan-14
GS00195	SO's Condition Approval	35d	05-Dec-13	08-Jan-14
Workshop for Tunnelling works (B1, B2)				
GS01000	1st Risk Management Workshop for TBM Tunnelling	0d		28-Aug-13 A
GS01010	Value Management Workshop for Tunneling Works	0d		25-Nov-13
GS01020	2nd Risk Management Workshop for Tunneling Works	0d		08-Jan-14
Risk Assessment of Submarine Cable-- Tunnelling Works (B6)				
GS01300	Propose Independant Submarine Cable Expert	6d	24-Jan-14	07-Feb-14
GS01305	SO's Approval	14d	03-Feb-14	17-Feb-14
GS01310	Appoint Independant Submarine Cable Expert	6d	17-Feb-14	24-Feb-14
GS01400	Preparation of Risk Assessment of Submarine cables - Tunnelling Works	24d	24-Feb-14	22-Mar-14
Durability Assessment Report (A9)				
GS01500	Preparation of Durability Assessment Report	36d	18-Sep-13 A	29-Nov-13
GS01505	1st Submission (1st Draft)	0d		29-Nov-13
GS01510	SO's Comments for 1st Submission	35d	30-Nov-13	03-Jan-14
GS01515	Prepare Re-submission	10d	04-Jan-14	15-Jan-14
GS01520	2nd Submission (Final)	0d		15-Jan-14
GS01525	ICE Cert. Issue	6d	16-Jan-14	22-Jan-14
GS01550	SO's Condition Approval	35d	16-Jan-14	19-Feb-14
ACABAS Submissions (A10)				
GS01600	Preparation of ACABAS submissions	30d	16-Oct-13 A	07-Dec-13
GS01610	*1st Submission (1st Draft)	0d		07-Dec-13
GS01620	ACABAS Comment	14d	08-Dec-13	21-Dec-13
GS01630	Prepare Re-submission	12d	23-Dec-13	08-Jan-14
GS01640	*Re-submission	0d		08-Jan-14
GS01650	ACABAS Approval	14d	09-Jan-14	22-Jan-14
Submissons to Design Advisory Panel of ArchSD (A11)				
GS01700	Preparation of Submissions to Design Advisory Panel of ArchSD	30d	25-Nov-13	31-Dec-13
GS01710	1st Submission	0d		31-Dec-13
GS01720	ArchSD's comment	30d	01-Jan-14	30-Jan-14
GS01730	Prepare Re-submission	18d	07-Feb-14	27-Feb-14
Works Area				
Northern Landfall				
Submission under ER				
Additional Ground Investigation Plan - CPT				
GS00600	Preparation of Additional Ground Investigation - CPT	11d	08-Aug-13 A	24-Aug-13 A
GS00610	1st Submission	0d		24-Aug-13 A
GS00650	SO's Comments for 1st Submission	35d	25-Aug-13 A	16-Sep-13 A
GS00660	SO's Condition Approval	0d		16-Sep-13 A
Additional Ground Investigation Plan - Nth Landfall & Tunnel				
GS00620	Preparation of Additional Ground Investigation - Nth Landfall & Tunnel	11d	18-Sep-13 A	24-Oct-13 A
GS00690	1st Submission	0d		24-Oct-13 A
GS01282	SO's Comments for 1st Submission	35d	25-Oct-13 A	01-Dec-13



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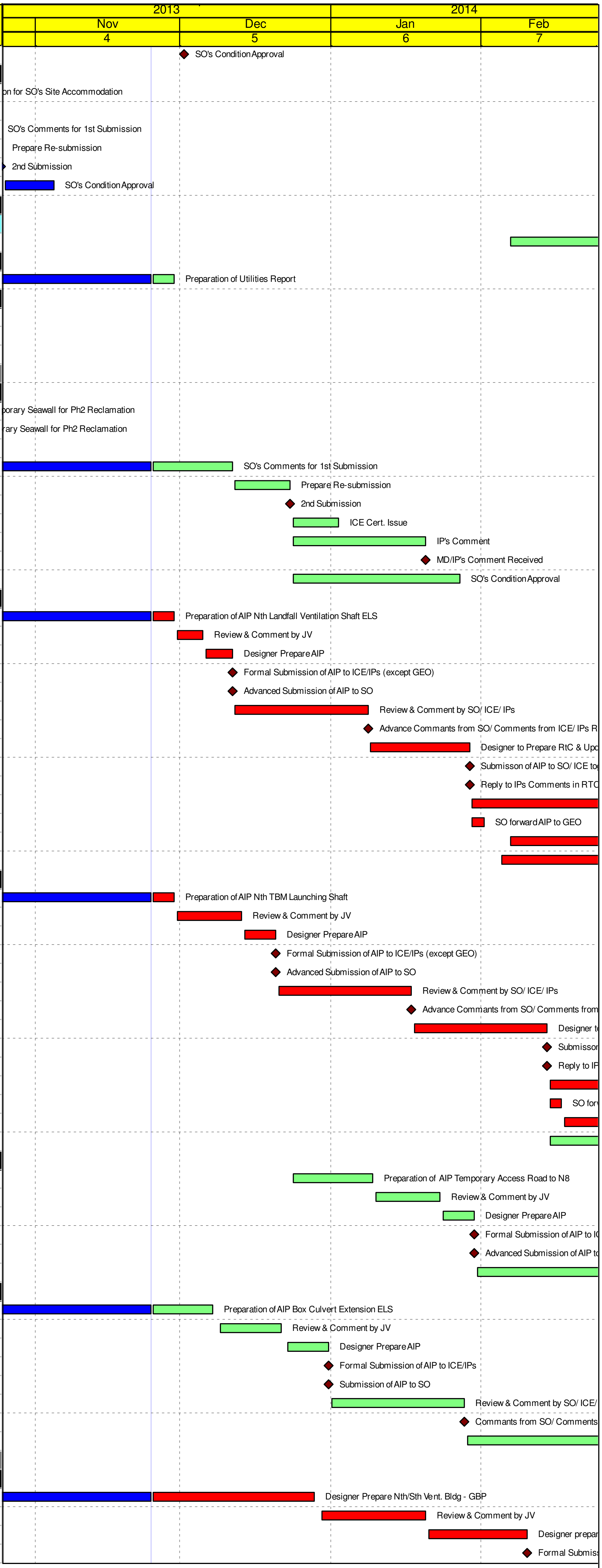
TMCLK - Northern Connection Sub-Sea Tunnel Section

Three-months Rolling Programme

香港寶嘉 Dragages HongKong
BOUYGUES TRAVAUX PUBLICS
Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Date	Revision	Checked	Approved

Activity ID	Activity Name	Original Duration	Start	Finish
GS01284	SO's Condition Approval	0d		01-Dec-13
SO's Site Accommodation				
GS02490	Preparation of Submission for SO's Site Accommodation	36d	31-Aug-13 A	04-Oct-13 A
GS02500	1st Submission	0d		04-Oct-13 A
GS02510	SO's Comments for 1st Submission	35d	05-Oct-13 A	24-Oct-13 A
GS02520	Prepare Re-submission	12d	25-Oct-13 A	25-Oct-13 A
GS02540	2nd Submission	0d		25-Oct-13 A
GS02550	SO's Condition Approval	35d	26-Oct-13 A	05-Nov-13 A
Construciton TIA Report (incl.TTMS) (A8)				
TIA Report				
GS001050	Preparation of Construction Trafic Impact Assessment Report	48d	07-Feb-14	03-Apr-14
Utilities Report (A7)				
GS00800	Preparation of Utilities Report	24d	05-Aug-13 A	29-Nov-13
Temp. Pontoon (A16)				
GS01800	Preparation of Temporary pontoon	18d	27-Jul-13 A	05-Sep-13 A
GS01810	1st Submission	0d		05-Sep-13 A
GS01820	MD's approval	28d	06-Sep-13 A	26-Sep-13 A
Temporary Design Submission				
Temporay Seawall for Ph.2 Reclamation				
GS02555	Designer Prepare - Temporary Seawall for Ph2 Reclamation	7d	05-Aug-13 A	04-Oct-13 A
GS02560	JV Review - Temporary Seawall for Ph2 Reclamation	6d	05-Oct-13 A	08-Oct-13 A
GS02570	1st Submission	0d		08-Oct-13 A
GS02580	SO's Comments for 1st Submission	35d	09-Oct-13 A	11-Dec-13
GS02590	Prepare Re-submission	10d	12-Dec-13	23-Dec-13
GS02592	2nd Submission	0d		23-Dec-13
GS02600	ICE Cert. Issue	6d	24-Dec-13	02-Jan-14
GS02602	IP's Comment	28d	24-Dec-13	20-Jan-14
GS02604	MD/IP's Comment Received	0d		20-Jan-14
GS02610	SO's Condition Approval	35d	24-Dec-13	27-Jan-14
AIP Temp.works - North Ventilation Shaft ELS				
AP01100	Preparation of AIP Nth Landfall Ventilation Shaft ELS	9d	05-Aug-13 A	29-Nov-13
AP01105	Review & Comment by JV	5d	30-Nov-13	05-Dec-13
AP01110	Designer Prepare AIP	5d	06-Dec-13	11-Dec-13
AP01115	Formal Submission of AIP to ICE/IPs (except GEO)	0d		11-Dec-13
AP01120	Advanced Submission of AIP to SO	0d		11-Dec-13
AP01125	Review & Comment by SO/ ICE/ IPs	28d	12-Dec-13	08-Jan-14
AP01130	Advance Comments from SO/ Comments from ICE/ IPs Received	0d		08-Jan-14
AP01135	Designer to Prepare RtC & Updated AIP	18d	09-Jan-14	29-Jan-14
AP01140	Submisson of AIP to SO/ ICE together with Reply To Comment (RTC)	0d		29-Jan-14
AP01145	Reply to IPs Comments in RTC	0d		29-Jan-14
AP01150	ICE Approval & Issue of Design Check Cert.	18d	30-Jan-14	26-Feb-14
AP01165	SO forward AIP to GEO	3d	30-Jan-14	01-Feb-14
AP01170	GEO Review (4 weeks)	28d	07-Feb-14	06-Mar-14
AP01180	SO Review (35 Days)	35d	05-Feb-14	11-Mar-14
AIP Temp.works - North TBM Launching Shaft ELS				
AP01200	Preparation of AIP Nth TBM Launching Shaft	12d	12-Oct-13 A	29-Nov-13
AP01205	Review & Comment by JV	12d	30-Nov-13	13-Dec-13
AP01210	Designer Prepare AIP	6d	14-Dec-13	20-Dec-13
AP01215	Formal Submission of AIP to ICE/IPs (except GEO)	0d		20-Dec-13
AP01220	Advanced Submission of AIP to SO	0d		20-Dec-13
AP01225	Review & Comment by SO/ ICE/ IPs	28d	21-Dec-13	17-Jan-14
AP01230	Advance Comments from SO/ Comments from ICE/ IPs Received	0d		17-Jan-14
AP01235	Designer to Prepare RtC & Updated AIP	18d	18-Jan-14	14-Feb-14
AP01240	Submisson of AIP to SO/ ICE together with Reply To Comment (RTC)	0d		14-Feb-14
AP01245	Reply to IPs Comments in RTC	0d		14-Feb-14
AP01250	ICE Approval & Issue of Design Check Cert.	18d	15-Feb-14	07-Mar-14
AP01265	SO forward AIP to GEO	3d	15-Feb-14	17-Feb-14
AP01270	GEO Review (4 weeks)	28d	18-Feb-14	17-Mar-14
AP01280	SO Review (35 Days)	35d	15-Feb-14	21-Mar-14
AIP Temp.works - Temporary access to Portion N8A-C incl. Temp. Lighting (D1)				
AP01500	Preparation of AIP Temporary Access Road to N8	12d	24-Dec-13	09-Jan-14
AP01505	Review & Comment by JV	12d	10-Jan-14	23-Jan-14
AP01510	Designer Prepare AIP	6d	24-Jan-14	30-Jan-14
AP01515	Formal Submission of AIP to ICE/IPs (except GEO)	0d		30-Jan-14
AP01520	Advanced Submission of AIP to SO	0d		30-Jan-14
AP01525	Review & Comment by SO/ ICE/ IPs	28d	31-Jan-14	27-Feb-14
AIP Temp.works - Extension of Existing Culvert adjacent to RTT (D4)				
AP01700	Preparation of AIP Box Culvert Extension ELS	12d	24-Sep-13 A	07-Dec-13
AP01705	Review & Comment by JV	12d	09-Dec-13	21-Dec-13
AP01710	Designer Prepare AIP	6d	23-Dec-13	31-Dec-13
AP01715	Formal Submission of AIP to ICE/IPs	0d		31-Dec-13
AP01720	Submission of AIP to SO	0d		31-Dec-13
AP01725	Review & Comment by SO/ ICE/ IPs	28d	01-Jan-14	28-Jan-14
AP01730	Comments from SO/ Comments from ICE/ IPs Received	0d		28-Jan-14
AP01735	Designer to Prepare RtC & Updated AIP	18d	29-Jan-14	25-Feb-14
Permanent Design Submission				
AIP - North & South Ventilation Buildings - GBP (I1)				
AP00500	Designer Prepare Nth/Sth Vent. Bldg - GBP	36d	08-Aug-13 A	28-Dec-13
AP00505	Review & Comment by JV	18d	30-Dec-13	20-Jan-14
AP00510	Designer prepare AIP	12d	21-Jan-14	10-Feb-14
AP00515	Formal Submission of AIP to ICE/IPs	0d		10-Feb-14



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TMCLK - Northern Connection Sub-Sea Tunnel Section

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BOUYGUES TRAVAUX PUBLICS
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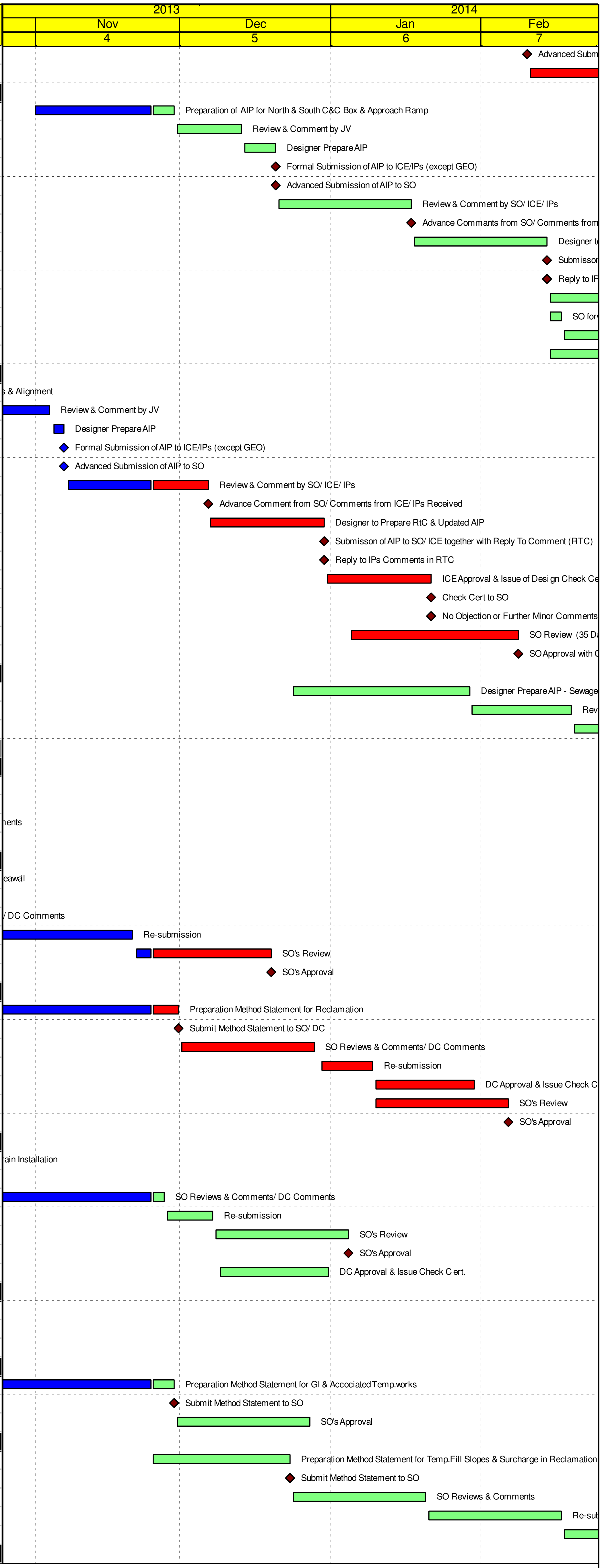
Date	Revision	Checked	Approved

Activity ID	Activity Name	Original Duration	Start	Finish
AP00520	Advanced Submission of AIP to SO	0d		10-Feb-14
AP00525	Review & Comment by SO/ ICE/ IPs	28d	11-Feb-14	10-Mar-14
AIP - North & South C&C Box & Approach Ramp (C1 & E2)				
AP00200	Preparation of AIP for North & South C&C Box & Approach Ramp	12d	01-Nov-13 A	29-Nov-13
AP00205	Review & Comment by JV	12d	30-Nov-13	13-Dec-13
AP00210	Designer Prepare AIP	6d	14-Dec-13	20-Dec-13
AP00215	Formal Submission of AIP to ICE/IPs (except GEO)	0d		20-Dec-13
AP00220	Advanced Submission of AIP to SO	0d		20-Dec-13
AP00225	Review & Comment by SO/ ICE/ IPs	28d	21-Dec-13	17-Jan-14
AP00230	Advance Comments from SO/ Comments from ICE/ IPs Received	0d		17-Jan-14
AP00235	Designer to Prepare RtC & Updated AIP	18d	18-Jan-14	14-Feb-14
AP00240	Submisson of AIP to SO/ ICE together with Reply To Comment (RTC)	0d		14-Feb-14
AP00245	Reply to IPs Comments in RTC	0d		14-Feb-14
AP00250	ICE Approval & Issue of Design Check Cert.	18d	15-Feb-14	07-Mar-14
AP00265	SO forward AIP to GEO	3d	15-Feb-14	17-Feb-14
AP00270	GEO Review (4 weeks)	28d	18-Feb-14	17-Mar-14
AP00280	SO Review (35 Days)	35d	15-Feb-14	21-Mar-14
AIP - Roadoworks & Project Alignment (A19)				
AP00100	Designer prepare AIP - Roadworks & Alignment	9d	05-Aug-13 A	27-Sep-13 A
AP00105	Review & Comment by JV	6d	28-Sep-13 A	04-Nov-13 A
AP00110	Designer Prepare AIP	6d	05-Nov-13 A	07-Nov-13 A
AP00115	Formal Submission of AIP to ICE/IPs (except GEO)	0d		07-Nov-13 A
AP00120	Advanced Submission of AIP to SO	0d		07-Nov-13 A
AP00125	Review & Comment by SO/ ICE/ IPs	28d	08-Nov-13 A	06-Dec-13
AP00130	Advance Comment from SO/ Comments from ICE/ IPs Received	0d		06-Dec-13
AP00135	Designer to Prepare RtC & Updated AIP	18d	07-Dec-13	30-Dec-13
AP00140	Submisson of AIP to SO/ ICE together with Reply To Comment (RTC)	0d		30-Dec-13
AP00145	Reply to IPs Comments in RTC	0d		30-Dec-13
AP00150	ICE Approval & Issue of Design Check Cert.	18d	31-Dec-13	21-Jan-14
AP00155	Check Cert to SO	0d		21-Jan-14
AP00160	No Objection or Further Minor Comments from IPs Received	0d		21-Jan-14
AP00180	SO Review (35 Days)	35d	05-Jan-14	08-Feb-14
AP00185	SO Approval with Condition Received	0d		08-Feb-14
AIP - Sewage, Drainage, Waterworks & UU (C2 & E3)				
AP01010	Designer Prepare AIP - Sewage, Drainage, Waterworks & UU	29d	24-Dec-13	29-Jan-14
AP01015	Review & Comment by JV	12d	30-Jan-14	19-Feb-14
AP01020	Designer Prepare AIP	6d	20-Feb-14	26-Feb-14
Method Statement Submission				
Method Statement of Construction Methodology of Dredging & Disposal				
MS1010	Preparation Method Statement for Dredging & Disposal	19d	27-Jul-13 A	26-Aug-13 A
MS1020	Submit Method Statement to SO/ DC	0d		26-Aug-13 A
MS1030	SO Reviews & Comments/ DC Comments	28d	27-Aug-13 A	24-Sep-13 A
MS1070	SO's Approval	0d		24-Sep-13 A
Method Statement of Construction Methodology of Sloping & Vertical Seawall				
MS1190	Preparation Method Statement for Sloping & Vertical Seawall	19d	27-Jul-13 A	12-Sep-13 A
MS1280	Submit Method Statement to SO/ DC	0d		12-Sep-13 A
MS1290	SO Reviews & Comments/ DC Comments	28d	13-Sep-13 A	03-Oct-13 A
MS1390	Re-submission	9d	04-Oct-13 A	21-Nov-13 A
MS1470	SO's Review	28d	22-Nov-13 A	19-Dec-13
MS1480	SO's Approval	0d		19-Dec-13
Method Statement of Reclamation Sequence & Methods				
MS1100	Preparation Method Statement for Reclamation	19d	27-Jul-13 A	30-Nov-13
MS1110	Submit Method Statement to SO/ DC	0d		30-Nov-13
MS1120	SO Reviews & Comments/ DC Comments	28d	01-Dec-13	28-Dec-13
MS1130	Re-submission	9d	30-Dec-13	09-Jan-14
MS1140	DC Approval & Issue Check Cert.	18d	10-Jan-14	30-Jan-14
MS1150	SO's Review	28d	10-Jan-14	06-Feb-14
MS1160	SO's Approval	0d		06-Feb-14
Method Statement of Construction Methodology of Band Drain Installation				
MS1680	Preparation Method Statement for Band Drain Installation	19d	27-Jul-13 A	21-Sep-13 A
MS1690	Submit Method Statement to SO/ DC	0d		21-Sep-13 A
MS1780	SO Reviews & Comments/ DC Comments	28d	22-Sep-13 A	27-Nov-13
MS1790	Re-submission	9d	28-Nov-13	07-Dec-13
MS1880	SO's Review	28d	08-Dec-13	04-Jan-14
MS1890	SO's Approval	0d		04-Jan-14
MS1980	DC Approval & Issue Check Cert.	18d	09-Dec-13	31-Dec-13
Method Statement of Ground Investigation - CPT				
MS2800	Preparation Method Statement for GI & Accociated Temp.works	18d	05-Aug-13 A	29-Aug-13 A
MS2810	Submit Method Statement to SO	0d		29-Aug-13 A
MS2820	SO's Approval	28d	30-Aug-13 A	10-Sep-13 A
Method Statement of Ground Investigation - Northern Landfall & Tunnel				
MS2850	Preparation Method Statement for GI & Accociated Temp.works	18d	21-Oct-13 A	29-Nov-13
MS2860	Submit Method Statement to SO	0d		29-Nov-13
MS2870	SO's Approval	28d	30-Nov-13	27-Dec-13
Method Statement of Temp.Fill Slopes & Surcharge in Reclamation				
MS3100	Preparation Method Statement for Temp.Fill Slopes & Surcharge in Reclamation	25d	25-Nov-13	23-Dec-13
MS3110	Submit Method Statement to SO	0d		23-Dec-13
MS3120	SO Reviews & Comments	28d	24-Dec-13	20-Jan-14
MS3130	Re-submission	18d	21-Jan-14	17-Feb-14
MS3140	SO's Review	28d	18-Feb-14	17-Mar-14
Method Statement of Full Details of Materials,Plant & Operations involved in Diaphragm Wall				



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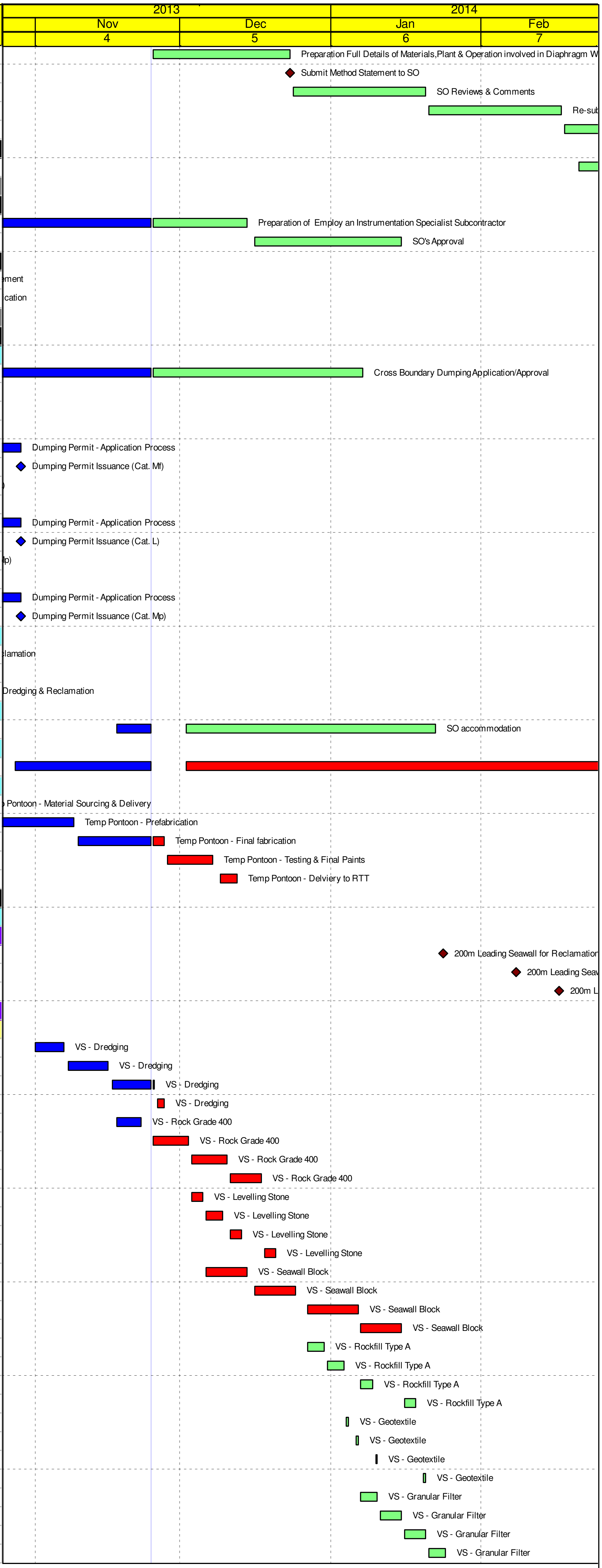
Date	Revision	Checked	Approved

Activity ID	Activity Name	Original Duration	Start	Finish
MS3300	Preparation Full Details of Materials,Plant & Operation involved in Diaphragm Wall	25d	25-Nov-13	23-Dec-13
MS3310	Submit Method Statement to SO	0d		23-Dec-13
MS3320	SO Reviews & Comments	28d	24-Dec-13	20-Jan-14
MS3330	Re-submission	18d	21-Jan-14	17-Feb-14
MS3340	SO's Review	28d	18-Feb-14	17-Mar-14
Method Statement of Providing the Groundwater Cut-offs & Pumping Test				
MS1900	Preparation Method Statement for Groundwater Cut-off & Pumping Test	25d	21-Feb-14	21-Mar-14
Sub-contracting & Procurment				
Employ an Instrumentation Specialist Subcontractor				
A3710	Preparation of Employ an Instrumentation Specialist Subcontractor	36d	05-Aug-13 A	14-Dec-13
A63780	SO's Approval	24d	16-Dec-13	15-Jan-14
Seawall Block				
PR060	Seawall Block - Procurement	21d	26-Jul-13 A	05-Oct-13 A
PR070	Seawall Block - Fabrication	0d	07-Oct-13 A	
Construction				
Establishment				
Sediment Quality Report/Dumping Permit				
DS100	Cross Boundary Dumping Application/Approval	58d	24-Aug-13 A	07-Jan-14
DS110	Letter to CEDD for AMFC	0d		30-Aug-13 A
DS145	Application Process for AMFC by CEDD (Cat. Mf)	21d	30-Aug-13 A	30-Aug-13 A
DS150	Prepare and Submission by JV	6d	31-Aug-13 A	09-Sep-13 A
DS160	Dumping Permit - Application Process	21d	09-Sep-13 A	29-Oct-13 A
DS170	Dumping Permit Issuance (Cat. Mf)	0d		29-Oct-13 A
DS175	Application Process for AMFC by CEDD (Cat. L)	21d	30-Aug-13 A	16-Sep-13 A
DS180	Prepare and Submission by JV	6d	17-Sep-13 A	17-Sep-13 A
DS190	Dumping Permit - Application Process	21d	18-Sep-13 A	29-Oct-13 A
DS200	Dumping Permit Issuance (Cat. L)	0d		29-Oct-13 A
DS205	Application Process for AMFC by CEDD (Cat. Mp)	21d	30-Aug-13 A	16-Sep-13 A
DS210	Prepare and Submission by JV	6d	17-Sep-13 A	17-Sep-13 A
DS220	Dumping Permit - Application Process	21d	18-Sep-13 A	29-Oct-13 A
DS230	Dumping Permit Issuance (Cat. Mp)	0d		29-Oct-13 A
Apply for Mairne Department Notice				
CGI0260	Prepare & Submit MDN Application for Dredging & Reclamation	20d	27-Jul-13 A	11-Sep-13 A
CGI0265	1st MMWG Meeting	0d		19-Aug-13 A
CGI0270	MDN Process for Dredging & Reclamation	21d	12-Sep-13 A	09-Oct-13 A
SO accommodation				
CTW0000	SO accommodation	42d	18-Nov-13 A	22-Jan-14
Additional GI				
CGI0300	Additonal GI for Northern Landfall	60d	28-Oct-13 A	31-May-14
Pontoon Temporary Reprovisioning				
CTW0020	Temp Pontoon - Material Sourcing & Delivery	9d	09-Sep-13 A	19-Oct-13 A
CTW0025	Temp Pontoon - Prefabrication	9d	21-Oct-13 A	09-Nov-13 A
CTW0030	Temp Pontoon - Final fabrication	18d	10-Nov-13 A	27-Nov-13
CTW0040	Temp Pontoon - Testing & Final Paints	9d	28-Nov-13	07-Dec-13
CTW0050	Temp Pontoon - Delviery to RTT	4d	09-Dec-13	12-Dec-13
Seawall, Reclamation & Surcharge, Ph.1				
Seawall and Reclamation (50m interval)				
200m Leading Seawall Achievement				
NR10000	200m Leading Seawall for Reclamation: 0-50	0d	24-Jan-14	
NR10010	200m Leading Seawall for Reclamation: 50-100	0d	08-Feb-14	
NR10020	200m Leading Seawall for Reclamation: 100-150	0d	17-Feb-14	
Zone E				
Vertical Seawall				
NR10150	VS - Dredging	2d	01-Nov-13 A	07-Nov-13 A
NR10160	VS - Dredging	2d	08-Nov-13 A	16-Nov-13 A
NR10170	VS - Dredging	2d	17-Nov-13 A	25-Nov-13
NR10180	VS - Dredging	2d	26-Nov-13	27-Nov-13
NR10190	VS - Rock Grade 400	7d	18-Nov-13 A	23-Nov-13 A
NR10200	VS - Rock Grade 400	7d	25-Nov-13	02-Dec-13
NR10210	VS - Rock Grade 400	7d	03-Dec-13	10-Dec-13
NR10220	VS - Rock Grade 400	6d	11-Dec-13	17-Dec-13
NR10230	VS - Levelling Stone	3d	03-Dec-13	05-Dec-13
NR10240	VS - Levelling Stone	3d	06-Dec-13	09-Dec-13
NR10250	VS - Levelling Stone	3d	11-Dec-13	13-Dec-13
NR10260	VS - Levelling Stone	3d	18-Dec-13	20-Dec-13
NR10270	VS - Seawall Block	8d	06-Dec-13	14-Dec-13
NR10280	VS - Seawall Block	8d	16-Dec-13	24-Dec-13
NR10290	VS - Seawall Block	8d	27-Dec-13	06-Jan-14
NR10300	VS - Seawall Block	8d	07-Jan-14	15-Jan-14
NR10310	VS - Rockfill Type A	3d	27-Dec-13	30-Dec-13
NR10320	VS - Rockfill Type A	3d	31-Dec-13	03-Jan-14
NR10330	VS - Rockfill Type A	3d	07-Jan-14	09-Jan-14
NR10340	VS - Rockfill Type A	3d	16-Jan-14	18-Jan-14
NR10350	VS - Geotextile	1d	04-Jan-14	04-Jan-14
NR10360	VS - Geotextile	1d	06-Jan-14	06-Jan-14
NR10370	VS - Geotextile	1d	10-Jan-14	10-Jan-14
NR10380	VS - Geotextile	1d	20-Jan-14	20-Jan-14
NR10390	VS - Granular Filter	4d	07-Jan-14	10-Jan-14
NR10400	VS - Granular Filter	4d	11-Jan-14	15-Jan-14
NR10410	VS - Granular Filter	4d	16-Jan-14	20-Jan-14
NR10420	VS - Granular Filter	4d	21-Jan-14	24-Jan-14



- 🟦 Actual Work
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- 🟩 Planned Bar
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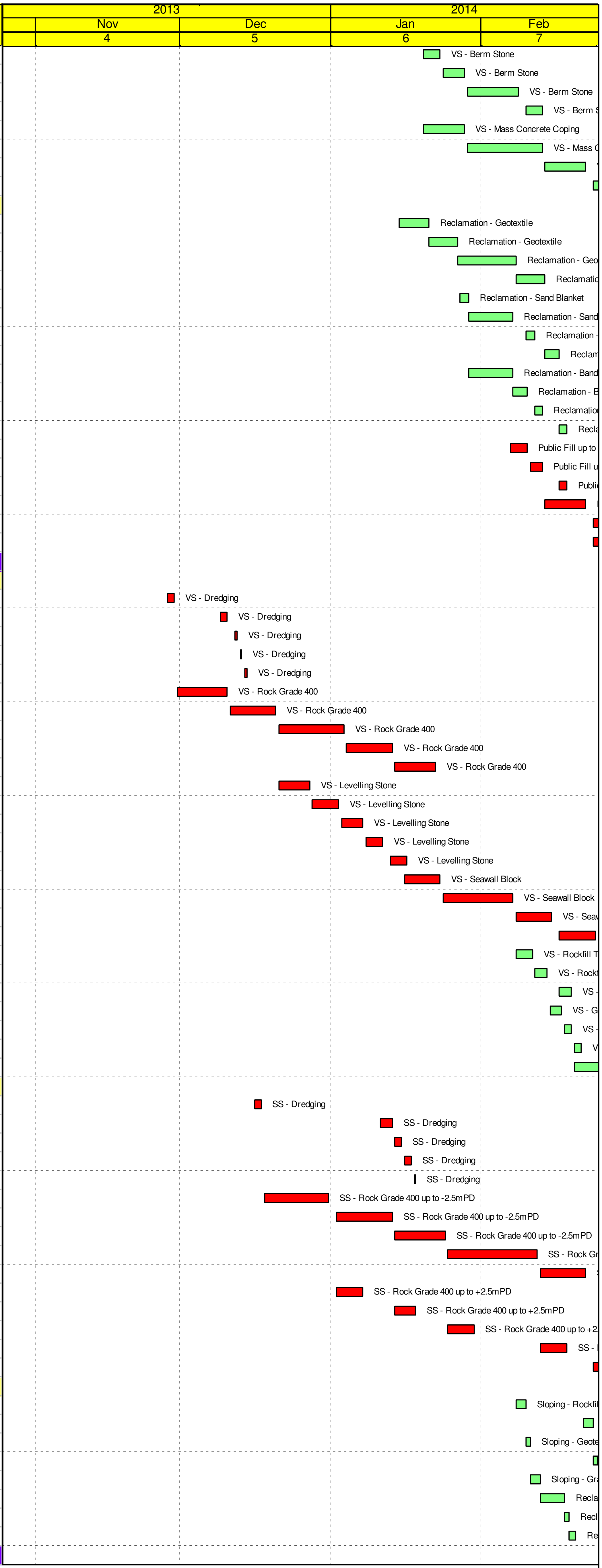
TMCLK - Northern Connection Sub-Sea Tunnel Section

Three-months Rolling Programme

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Date	Revision	Checked	Approved

Activity ID	Activity Name	Original Duration	Start	Finish
NR10430	VS - Berm Stone	4d	20-Jan-14	23-Jan-14
NR10440	VS - Berm Stone	4d	24-Jan-14	28-Jan-14
NR10450	VS - Berm Stone	4d	29-Jan-14	08-Feb-14
NR10460	VS - Berm Stone	4d	10-Feb-14	13-Feb-14
NR10470	VS - Mass Concrete Coping	8d	20-Jan-14	28-Jan-14
NR10480	VS - Mass Concrete Coping	8d	29-Jan-14	13-Feb-14
NR10490	VS - Mass Concrete Coping	8d	14-Feb-14	22-Feb-14
NR10500	VS - Mass Concrete Coping	8d	24-Feb-14	04-Mar-14
Reclamation				
NR10510	Reclamation - Geotextile	5d	15-Jan-14	21-Jan-14
NR10520	Reclamation - Geotextile	5d	21-Jan-14	27-Jan-14
NR10530	Reclamation - Geotextile	5d	27-Jan-14	08-Feb-14
NR10540	Reclamation - Geotextile	5d	08-Feb-14	14-Feb-14
NR10550	Reclamation - Sand Blanket	2d	27-Jan-14	29-Jan-14
NR10560	Reclamation - Sand Blanket	2d	29-Jan-14	07-Feb-14
NR10570	Reclamation - Sand Blanket	2d	10-Feb-14	12-Feb-14
NR10580	Reclamation - Sand Blanket	2d	14-Feb-14	17-Feb-14
NR10590	Reclamation - Band Drain	2d	29-Jan-14	07-Feb-14
NR10600	Reclamation - Band Drain	2d	07-Feb-14	10-Feb-14
NR10610	Reclamation - Band Drain	2d	12-Feb-14	13-Feb-14
NR10620	Reclamation - Band Drain	2d	17-Feb-14	18-Feb-14
NR10630	Public Fill up to -2.5mPD	3d	07-Feb-14*	10-Feb-14
NR10640	Public Fill up to -2.5mPD	3d	11-Feb-14	13-Feb-14
NR10650	Public Fill up to -2.5mPD	2d	17-Feb-14	18-Feb-14
NR10670	Public Fill up to +2.5mPD	8d	14-Feb-14	22-Feb-14
NR10680	Public Fill up to +2.5mPD	7d	24-Feb-14	03-Mar-14
NR10710	Public Fill up to +6.0mPD	8d	24-Feb-14	04-Mar-14
Zone D				
Vertical Seawall				
NR10790	VS - Dredging	2d	28-Nov-13	29-Nov-13
NR10800	VS - Dredging	2d	09-Dec-13	10-Dec-13
NR10810	VS - Dredging	1d	12-Dec-13	12-Dec-13
NR10820	VS - Dredging	1d	13-Dec-13	13-Dec-13
NR10830	VS - Dredging	1d	14-Dec-13	14-Dec-13
NR10840	VS - Rock Grade 400	9d	30-Nov-13	10-Dec-13
NR10850	VS - Rock Grade 400	9d	11-Dec-13	20-Dec-13
NR10860	VS - Rock Grade 400	9d	21-Dec-13	03-Jan-14
NR10870	VS - Rock Grade 400	8d	04-Jan-14	13-Jan-14
NR10880	VS - Rock Grade 400	8d	14-Jan-14	22-Jan-14
NR10890	VS - Levelling Stone	4d	21-Dec-13	27-Dec-13
NR10900	VS - Levelling Stone	4d	28-Dec-13	02-Jan-14
NR10910	VS - Levelling Stone	4d	03-Jan-14	07-Jan-14
NR10920	VS - Levelling Stone	4d	08-Jan-14	11-Jan-14
NR10930	VS - Levelling Stone	4d	13-Jan-14	16-Jan-14
NR10940	VS - Seawall Block	7d	16-Jan-14	23-Jan-14
NR10950	VS - Seawall Block	7d	24-Jan-14	07-Feb-14
NR10960	VS - Seawall Block	7d	08-Feb-14	15-Feb-14
NR10970	VS - Seawall Block	7d	17-Feb-14	24-Feb-14
NR10990	VS - Rockfill Type A	3d	08-Feb-14	11-Feb-14
NR11000	VS - Rockfill Type A	3d	12-Feb-14	14-Feb-14
NR11010	VS - Rockfill Type A	3d	17-Feb-14	19-Feb-14
NR11040	VS - Geotextile	2d	15-Feb-14	17-Feb-14
NR11050	VS - Geotextile	2d	18-Feb-14	19-Feb-14
NR11060	VS - Geotextile	2d	20-Feb-14	21-Feb-14
NR11120	VS - Granular Filter	5d	20-Feb-14	25-Feb-14
Sloping Seawall				
NR12000	SS - Dredging	2d	16-Dec-13	17-Dec-13
NR12040	SS - Dredging	2d	11-Jan-14	13-Jan-14
NR12080	SS - Dredging	2d	14-Jan-14	15-Jan-14
NR12130	SS - Dredging	2d	16-Jan-14	17-Jan-14
NR12170	SS - Dredging	1d	18-Jan-14	18-Jan-14
NR12210	SS - Rock Grade 400 up to -2.5mPD	10d	18-Dec-13	31-Dec-13
NR12260	SS - Rock Grade 400 up to -2.5mPD	10d	02-Jan-14	13-Jan-14
NR12300	SS - Rock Grade 400 up to -2.5mPD	10d	14-Jan-14	24-Jan-14
NR12400	SS - Rock Grade 400 up to -2.5mPD	10d	25-Jan-14	12-Feb-14
NR12810	SS - Rock Grade 400 up to -2.5mPD	9d	13-Feb-14	22-Feb-14
NR12920	SS - Rock Grade 400 up to +2.5mPD	5d	02-Jan-14	07-Jan-14
NR13030	SS - Rock Grade 400 up to +2.5mPD	5d	14-Jan-14	18-Jan-14
NR13140	SS - Rock Grade 400 up to +2.5mPD	5d	25-Jan-14	30-Jan-14
NR13200	SS - Rock Grade 400 up to +2.5mPD	5d	13-Feb-14	18-Feb-14
NR13210	SS - Rock Grade 400 up to +2.5mPD	4d	24-Feb-14	27-Feb-14
Reclamation				
NR13370	Sloping - Rockfill Type A	1d	08-Feb-14	10-Feb-14
NR13380	Sloping - Rockfill Type A	1d	22-Feb-14	24-Feb-14
NR13420	Sloping - Geotextile	1d	10-Feb-14	11-Feb-14
NR13430	Sloping - Geotextile	1d	24-Feb-14	25-Feb-14
NR13470	Sloping - Granular Filter	2d	11-Feb-14	13-Feb-14
NR13520	Reclamation - Geotextile	2d	13-Feb-14	18-Feb-14
NR13570	Reclamation - Sand Blanket	1d	18-Feb-14	19-Feb-14
NR13620	Reclamation - Band Drain	2d	19-Feb-14	20-Feb-14
Zone C				



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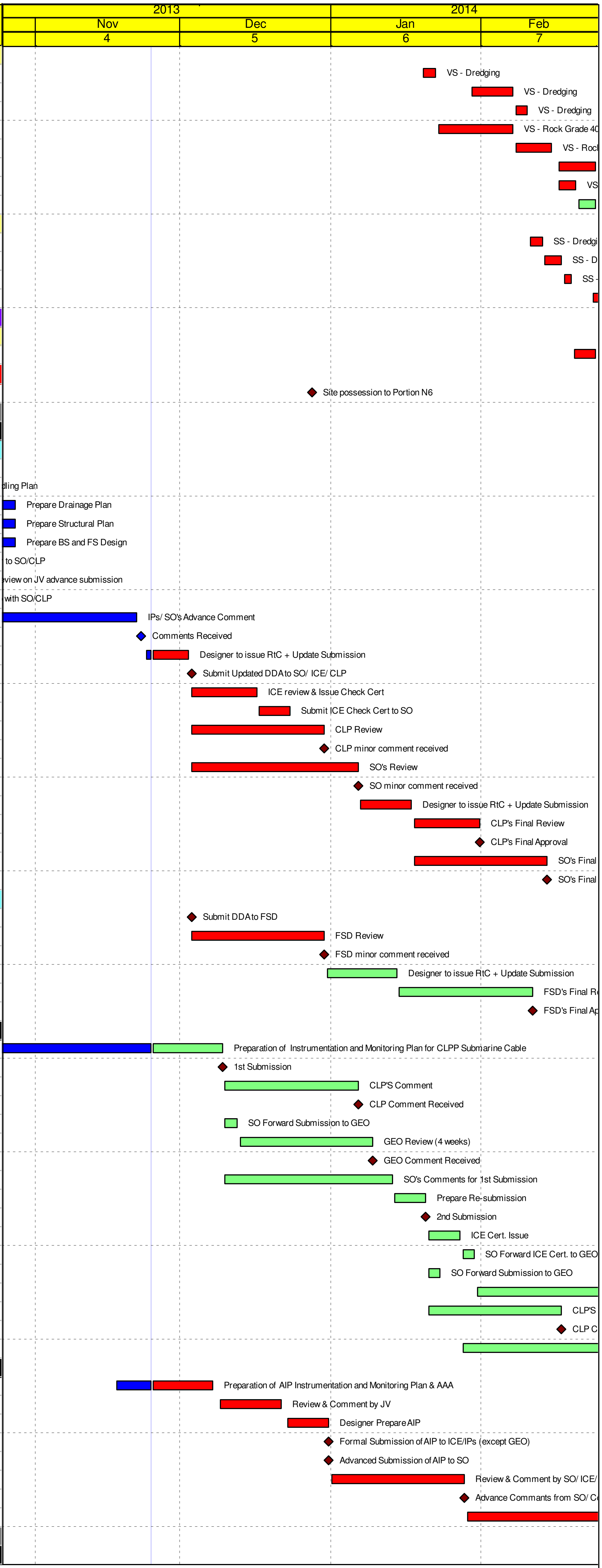
TMCLK - Northern Connection Sub-Sea Tunnel Section

Three-months Rolling Programme

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Date	Revision	Checked	Approved

Activity ID	Activity Name	Original Duration	Start	Finish
Vertical Seawall				
NR13870	VS - Dredging	3d	20-Jan-14	22-Jan-14
NR13880	VS - Dredging	2d	30-Jan-14	07-Feb-14
NR13890	VS - Dredging	2d	08-Feb-14	10-Feb-14
NR13900	VS - Rock Grade 400	8d	23-Jan-14	07-Feb-14
NR13910	VS - Rock Grade 400	7d	08-Feb-14	15-Feb-14
NR13920	VS - Rock Grade 400	7d	17-Feb-14	24-Feb-14
NR13930	VS - Levelling Stone	4d	17-Feb-14	20-Feb-14
NR13940	VS - Levelling Stone	3d	21-Feb-14	24-Feb-14
Sloping Seawall				
NR14140	SS - Dredging	3d	11-Feb-14	13-Feb-14
NR14150	SS - Dredging	3d	14-Feb-14	17-Feb-14
NR14160	SS - Dredging	2d	18-Feb-14	19-Feb-14
NR14170	SS - Rock Grade 400 up to -2.5mPD	13d	24-Feb-14	10-Mar-14
Zone B				
Vertical Seawall				
NR11090	VS - Dredging	4d	20-Feb-14	24-Feb-14
TBM Tunnel & Cross Passages				
A65215	Site possession to Portion N6	0d	28-Dec-13*	
Temporary Design Submission				
DDA Temp.CLP Power Substation				
CLP Submission				
DD05351	Prepare Design Layout Plan with CLPP	7d	10-Sep-13 A	17-Sep-13 A
DD05353	Prepare General Buidling Plan	14d	18-Sep-13 A	07-Oct-13 A
DD05354	Prepare Drainage Plan	17d	08-Oct-13 A	28-Oct-13 A
DD05355	Prepare Structural Plan	28d	18-Sep-13 A	28-Oct-13 A
DD05359	Prepare BS and FS Design	32d	18-Sep-13 A	28-Oct-13 A
DD05400	Advance Submission to SO/CLP	0d		07-Oct-13 A
DD05405	SO/CLP review on JV advance submission	6d	08-Oct-13 A	15-Oct-13 A
DD05407	Workshop with SO/CLP	0d	15-Oct-13 A	
DD05410	IPs/ SO's Advance Comment	7d	16-Oct-13 A	22-Nov-13 A
DD05420	Comments Received	0d		23-Nov-13 A
DD05430	Designer to issue RtC + Update Submission	6d	24-Nov-13 A	02-Dec-13
DD05440	Submit Updated DDA to SO/ ICE/ CLP	0d	03-Dec-13	
DD05450	ICE review & Issue Check Cert	12d	03-Dec-13	16-Dec-13
DD05460	Submit ICE Check Cert to SO	6d	17-Dec-13	23-Dec-13
DD05470	CLP Review	28d	03-Dec-13	30-Dec-13
DD05480	CLP minor comment received	0d		30-Dec-13
DD05520	SO's Review	35d	03-Dec-13	06-Jan-14
DD05530	SO minor comment received	0d		06-Jan-14
DD05560	Designer to issue RtC + Update Submission	10d	07-Jan-14	17-Jan-14
DD6270	CLP's Final Review	14d	18-Jan-14	31-Jan-14
DD6280	CLP's Final Approval	0d		31-Jan-14
DD6290	SO's Final Review	28d	18-Jan-14	14-Feb-14
DD6300	SO's Final Approval	0d		14-Feb-14
FSD Submission				
DD6305	Submit DDA to FSD	0d	03-Dec-13	
DD6310	FSD Review	28d	03-Dec-13	30-Dec-13
DD6320	FSD minor comment received	0d		30-Dec-13
DD6350	Designer to issue RtC + Update Submission	12d	31-Dec-13	14-Jan-14
DD6360	FSD's Final Review	28d	15-Jan-14	11-Feb-14
DD6370	FSD's Final Approval	0d		11-Feb-14
Insturmentation & Monitoring Plan for CLPP Submarine Cable (A17)				
GS01900	Preparation of Instrumentation and Monitoring Plan for CLPP Submarine Cable	20d	10-Aug-13 A	09-Dec-13
GS01905	1st Submission	0d		09-Dec-13
GS01910	CLP'S Comment	28d	10-Dec-13	06-Jan-14
GS01915	CLP Comment Received	0d		06-Jan-14
GS01916	SO Forward Submission to GEO	3d	10-Dec-13	12-Dec-13
GS01917	GEO Review (4 weeks)	28d	13-Dec-13	09-Jan-14
GS01918	GEO Comment Received	0d		09-Jan-14
GS01920	SO's Comments for 1st Submission	35d	10-Dec-13	13-Jan-14
GS01925	Prepare Re-submission	6d	14-Jan-14	20-Jan-14
GS01930	2nd Submission	0d		20-Jan-14
GS01935	ICE Cert. Issue	6d	21-Jan-14	27-Jan-14
GS01940	SO Forward ICE Cert. to GEO	3d	28-Jan-14	30-Jan-14
GS01945	SO Forward Submission to GEO	3d	21-Jan-14	23-Jan-14
GS01950	GEO Review (4 weeks)	28d	31-Jan-14	27-Feb-14
GS01957	CLP'S Comment	28d	21-Jan-14	17-Feb-14
GS01958	CLP Comment Received	0d		17-Feb-14
GS01960	SO's Condition Approval	35d	28-Jan-14	03-Mar-14
AIP Temp.works - Instrumentation and Monitoring Plan & AAA (A18)				
AP01300	Preparation of AIP Instrumentation and Monitoring Plan & AAA	12d	18-Nov-13 A	07-Dec-13
AP01305	Review & Comment by JV	12d	09-Dec-13	21-Dec-13
AP01310	Designer Prepare AIP	6d	23-Dec-13	31-Dec-13
AP01315	Formal Submission of AIP to ICE/IPs (except GEO)	0d		31-Dec-13
AP01320	Advanced Submission of AIP to SO	0d		31-Dec-13
AP01325	Review & Comment by SO/ ICE/ IPs	28d	01-Jan-14	28-Jan-14
AP01330	Advance Commants from SO/ Comments from ICE/ IPs Received	0d		28-Jan-14
AP01335	Designer to Prepare RtC & Updated AIP	18d	29-Jan-14	25-Feb-14
Permanent Design Submission				
AIP - TBM Tunnel Lining & Internal Structures (G1)				



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TMCLK - Northern Connection Sub-Sea Tunnel Section

Three-months Rolling Programme

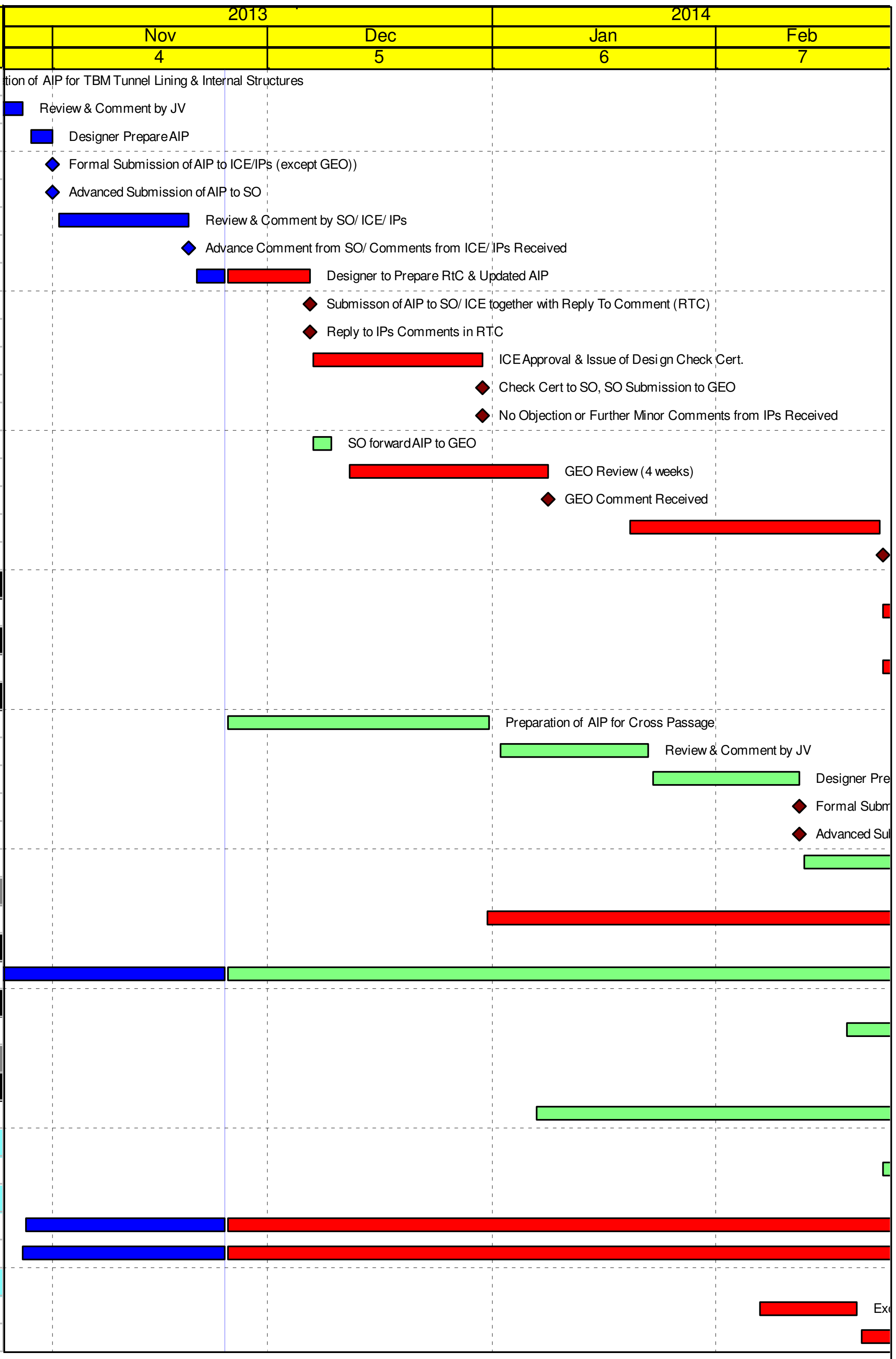
Dragages HongKong

BOUYGUES TRAVAUX PUBLICS

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Date	Revision	Checked	Approved

Activity ID	Activity Name	Original Duration	Start	Finish
AP00300	Preparation of AIP for TBM Tunnel Lining & Internal Structures	18d	27-Jul-13 A	17-Oct-13 A
AP00305	Review & Comment by JV	12d	19-Oct-13 A	28-Oct-13 A
AP00310	Designer Prepare AIP	12d	29-Oct-13 A	01-Nov-13 A
AP00315	Formal Submission of AIP to ICE/IPs (except GEO))	0d		01-Nov-13 A
AP00320	Advanced Submission of AIP to SO	0d		01-Nov-13 A
AP00325	Review & Comment by SO/ ICE/ IPs	28d	02-Nov-13 A	20-Nov-13 A
AP00330	Advance Comment from SO/ Comments from ICE/ IPs Received	0d		20-Nov-13 A
AP00335	Designer to Prepare RtC & Updated AIP	18d	21-Nov-13 A	06-Dec-13
AP00340	Submisson of AIP to SO/ ICE together with Reply To Comment (RTC)	0d		06-Dec-13
AP00345	Reply to IPs Comments in RTC	0d		06-Dec-13
AP00350	ICE Approval & Issue of Design Check Cert.	18d	07-Dec-13	30-Dec-13
AP00355	Check Cert to SO, SO Submission to GEO	0d		30-Dec-13
AP00360	No Objection or Further Minor Comments from IPs Received	0d		30-Dec-13
AP00365	SO forward AIP to GEO	3d	07-Dec-13	09-Dec-13
AP00370	GEO Review (4 weeks)	28d	12-Dec-13	08-Jan-14
AP00375	GEO Comment Received	0d		08-Jan-14
AP00380	SO Review (35 Days)	35d	20-Jan-14	23-Feb-14
AP00385	SO Approval with Condition Received	0d		24-Feb-14
DDA for TBM Tunnel Lining Settlement Anlysis & Confinement Pressure (G1)				
DD00800	Preparation of DDA Permanent Works	18d	24-Feb-14	15-Mar-14
DDA for TBM Tunnel Lining Structural Design (G1)				
DD00700	Preparation of DDA	18d	24-Feb-14	15-Mar-14
AIP - Cross Passage (G2)				
AP00400	Preparation of AIP for Cross Passage	30d	25-Nov-13	31-Dec-13
AP00405	Review & Comment by JV	18d	02-Jan-14	22-Jan-14
AP00410	Designer Prepare AIP	12d	23-Jan-14	12-Feb-14
AP00415	Formal Submission of AIP to ICE/IPs (except GEO)	0d		12-Feb-14
AP00420	Advanced Submission of AIP to SO	0d		12-Feb-14
AP00425	Review & Comment by SO/ ICE/ IPs	28d	13-Feb-14	12-Mar-14
Sub-contracting & Procurment				
A66390	Electrical Pump - Procurement, Supply & Delivery	140d	31-Dec-13	27-Jun-14
TBM				
PR020	Fabricate TBM & Deliver to Site	330d	16-Oct-13 A	08-Dec-14
Slurry Treatment Plant				
PR090	Slurry Treatment Plant - Fabrication & On-site Installation	330d	19-Feb-14	02-Apr-15
Construction				
Temporary Substation				
CTS0010	Temporary Substation construction	250d	07-Jan-14	13-Nov-14
TTMS for Utilities				
A65210	Trench Excavation & Service Connection	48d	24-Feb-14	24-Apr-14
CLP Coordination				
A65260	1st Batch - Order , Manfacturing & Delivery	206d	28-Oct-13 A	28-Jun-14
A65270	2nd Batch - Order Manfacturing & Delivery	292d	28-Oct-13 A	14-Oct-14
Temporary Substation				
CTS0099	Excavation & Earth Mat Installation	12d	07-Feb-14	20-Feb-14
CTS0100	Temporary Substation Construction - Foundation	9d	21-Feb-14	03-Mar-14



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TMCLK - Northern Connection Sub-Sea Tunnel Section

Three-months Rolling Programme

Dragages - Bouygues Joint Venture 寶嘉 - 布依格聯營

Date	Revision	Checked	Approved

Appendix C

Environmental Mitigation and Enhancement Measure Implementation Schedules

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Air Quality

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	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		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Air Quality

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	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		✓
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	All site exits / throughout construction period	Contractor	TMEIA Avoid dust		Y		✓

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Air Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		any earthworks excavation activity on the site.							
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		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
Marine Works (Sequence A)									
6.10 Figure 6.2a Appendix D6a	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		N/A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	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		N/A
6.10	-	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
6.10	-	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		N.A
6.10	-	Use of cage type silt curtains round all	All areas dredging works	Contractor	TM-EIAO		Y		N/A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		grab dredgers during the HKBCF, HKLR and TM-CLKL southern reclamation works.							
	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		✓
6.10	-	Trailer suction hopper dredgers shall not allow mud to overflow.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	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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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10 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		N/A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	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
6.10	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		✓
6.10	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		✓
6.10	-	TM-CLKL northern landfall: - Reclamation filling shall not proceed until at least 200m section of leading seawall at both the east and west sides	All areas/ through out marine works	Contractor	TM-EIAO		Y		N/A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		of the reclamation are formed above +2.5 mPD, except for 100m gaps for marine access;							
General Marine Works									
6.10	-	Use of TMB for the construction of the submarine tunnel.	Tunnel works / Construction phase	Contractor	TM-EIAO		Y		N/A
6.10	-	Export dredged spoils from NWWCZ.	All areas as much as possible / dredging activities	Contractor	DASO Permit conditions		Y		N/A
6.10	-	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
6.10	-	Where sand fill is proposed for filling	All areas/ backfilling works	Contractor	TM-EIAO		Y		N.A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		below +2.5mPD, the fine content in the sand fill will be controlled to 5%.							
6.10	-	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		✓
6.10	-	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		✓
6.10	-	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		<>
6.10	-	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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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	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		✓
6.10	-	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
6.10	-	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
6.10	-	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		✓
6.10	5.2	Silt curtain shall have proved effectiveness from the producer and shall be fully maintained throughout the works by the	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		contractor.							
6.10	-	The daily maximum production rates shall not exceed those assumed in the water quality assessment.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	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		✓
Land Works									
6.10	-	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		✓
6.10	-	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		✓
6.10	-	Storm drainage shall be directed to storm	All areas/ throughout	Contractor	TM-EIAO		Y		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		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.	construction period						
6.10	-	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		✓
6.10	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	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		✓
6.10	-	Measures should be taken to prevent the washout of construction materials, soil, silt	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<>

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		or debris into any drainage system.							
6.10	-	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		<>
6.10	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		✓
6.10	-	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		✓
6.10	-	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		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	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		✓
6.10	-	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		✓
6.10	-	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		✓
6.10	-	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
6.10	-	The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		cleaned up immediately.							
6.10	-	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		✓
6.10	-	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		<>
6.10	-	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		N/A
6.10	-	Roadside gullies to trap silt and grit shall be provided prior to discharging the stormwater into the marine environment. The sumps will be maintained and cleaned at regular intervals.	Roadside/design and operation	Design Consultant/ Contractor	TM-EIAO	Y		Y	✓
6.10	Section 5	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good	All areas/ throughout construction period	Contractor	EM&A Manual		Y		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Water Quality

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		working practice.							
Water Quality Monitoring									
6.10	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	✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Ecology

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
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	✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Ecology

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
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		<>
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		**N/A**

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Ecology

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
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		✓
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		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscape and Visual

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
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

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscape and Visual

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
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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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscape and Visual

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities (OM5)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (OM6)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
12.6		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		✓
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	Contract Mobilisation	Contractor	TMEIA		Y		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		including waste reduction, reuse and recycling							
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		N/A

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
12.6	8.1	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		<>
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		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
12.6	8.1	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	All areas / throughout construction period	Contractor	TMEIA		Y		✓

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

ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		be considered for segregation and storage activities.							
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: ƒ suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; ƒ Having a capacity of <450L unless the specifications have been approved by the EPD; and ƒ Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations. ƒ Clearly labelled and used solely for the storage of chemical wastes; ƒ Enclosed with at least 3 sides; ƒ Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20%	All areas / throughout construction period	Contractor	TMEIA		Y		<>

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		by volume of the chemical waste stored in the area, whichever is greatest; ƒ Adequate ventilation; ƒ Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and ƒ 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
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	All areas / throughout construction period	Contractor	TMEIA		Y		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Waste

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		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.							
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		✓

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ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Cultural Heritage

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
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		✓

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

Remark:

✓	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

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 µg/m³	ASR1 = 213 ASR5 = 238 AQMS1 = 213 AQMS2 = 238 ASR10 = 214	260
1 Hour TSP Level in µg /m³	ASR1 = 331 ASR5 = 340 AQMS1 = 335 AQMS2 = 338 ASR10 = 337	500

Table D2 Action and Limit Levels for Water Quality

Parameter	Action Level#	Limit Level#
DO in mg/L [(a)]	Surface and Middle **5.0 mg/L** Bottom **4.7 mg/L**	Surface and Middle **4.2 mg/L** Bottom **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	[STG < 2.4 & ANI <8.9] and [STG < 3.9 & ANI <17.9]	

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 5
Calibrated by : P.F.Yeung
Date : 09/10/2013

Sampler

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

Calibration Orfice and Standard Calibration Relationship

Serial Number : 2323
Service Date : 26 Dec 2012
Slope (m) : 2.09107
Intercept (b) : -0.02838
Correlation Coefficient(r) : 0.99996

Standard Condition

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

Calibration Condition

Pa (hpa) : 1017
Ta(K) : 299

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.5	3.537	1.705	52	52.02
2	13 holes	9.7	3.115	1.503	45	45.01
3	10 holes	7.6	2.758	1.332	40	40.01
4	7 holes	4.7	2.169	1.051	31	31.01
5	5 holes	3.0	1.733	0.842	24	24.01

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

Sampler Calibration Relationship (Linear Regression)

Slope(m): 32.148 Intercept(b): -2.953 Correlation Coefficient(r): 0.9997

Checked by: Magnum Fan Date: 20/10/2013

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR10A
Calibrated by : P.F.Yeung
Date : 15/10/2013

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

Calibration Orfice and Standard Calibration Relationship
Serial Number : 2323
Service Date : 26 Dec 2012
Slope (m) : 2.09107
Intercept (b) : -0.02838
Correlation Coefficient(r) : 0.99996

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

Calibration Condition
Pa (hpa) : 1013
Ta(K) : 301

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	13.0	3.588	1.729	59	58.71
2	13 holes	10.4	3.209	1.548	52	51.74
3	10 holes	7.8	2.779	1.343	45	44.78
4	7 holes	5.0	2.225	1.078	36	35.82
5	5 holes	3.0	1.723	0.838	28	27.86

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

Sampler Calibration Relationship (Linear Regression)

Slope(m):34.384 Intercept(b): 1.161 Correlation Coefficient(r): 0.9997

Checked by: Magnum Fan Date: 20/10/2013

High-Volume TSP Sampler
5-Point Calibration Record

Location : AQM1
Calibrated by : P.F.Yeung
Date : 17/10/2013

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

Calibration Orfice and Standard Calibration Relationship
Serial Number : 2323
Service Date : 26 Dec 2012
Slope (m) : 2.09107
Intercept (b) : -0.02838
Correlation Coefficient(r) : 0.99996

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

Calibration Condition
Pa (hpa) : 1017
Ta(K) : 299

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	13.4	3.662	1.765	56	56.02
2	13 holes	9.4	3.067	1.480	47	47.01
3	10 holes	7.5	2.739	1.324	41	41.01
4	7 holes	5.0	2.237	1.083	33	33.01
5	5 holes	3.0	1.733	0.842	26	26.01

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

Sampler Calibration Relationship (Linear Regression)

Slope(m):32.944 Intercept(b): -2.175 Correlation Coefficient(r): 0.9990

Checked by: Magnum Fan Date: 20/10/2013

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 1
Calibrated by : P.F.Yeung
Date : 17/10/2013

Sampler

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

Calibration Orfice and Standard Calibration Relationship

Serial Number : 2323
Service Date : 26 Dec 2012
Slope (m) : 2.09107
Intercept (b) : -0.02838
Correlation Coefficient(r) : 0.99996

Standard Condition

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

Calibration Condition

Pa (hpa) : 1016
Ta(K) : 299

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	13.0	3.605	1.737	52	51.99
2	13 holes	10.4	3.224	1.555	46	45.99
3	10 holes	7.8	2.792	1.349	39	38.99
4	7 holes	5.0	2.236	1.083	30	29.99
5	5 holes	3.0	1.732	0.842	23	22.99

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

Sampler Calibration Relationship (Linear Regression)

Slope(m):32.647 Intercept(b): -4.881 Correlation Coefficient(r): 0.9996

Checked by: Magnum Fan Date: 20/10/2013

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 6A
Calibrated by : P.F.Yeung
Date : 17/10/2013

Sampler

Model : TE-5170
Serial Number : S/N 1059

Calibration Orfice and Standard Calibration Relationship

Serial Number : 2323
Service Date : 26 Dec 2012
Slope (m) : 2.09107
Intercept (b) : -0.02838
Correlation Coefficient(r) : 0.99996

Standard Condition

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

Calibration Condition

Pa (hpa) : 1017
Ta(K) : 299

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	12.5	3.537	1.705	56	56.02
2	13 holes	10.0	3.163	1.526	50	50.01
3	10 holes	8.0	2.829	1.367	44	44.01
4	7 holes	5.2	2.281	1.104	35	35.01
5	5 holes	2.8	1.674	0.814	26	26.01

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

Sampler Calibration Relationship (Linear Regression)

Slope(m):32.148 Intercept(b): -2.953 Correlation Coefficient(r): 0.9997

Checked by: Magnum Fan Date: 20/10/2013

Performance Check of Turbidity Meter

Equipment Ref. No.	: ET/0505/010	Manufacturer	: HACH
Model No.	: 2100Q	Serial No.	: 11110 C 014260
Date of Calibration	: 08/102013	Due Date	: 07/01/2014

Gelex Vial Std	Theoretical Value (NTU)	Measured Value (NTU)	Difference %
0-10 NTU	5	5.23	4.50
10-100 NTU	50	52.1	4.11
100-1000 NTU	550	566	2.87

Acceptance Criteria

Difference : -5 % to 5%

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

Checked by : ____________

Approved by : ____________

Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/003

Manufacturer : HANNA

Model No. : HI 8314

Serial No. : 674469

Date of Calibration : 09/10/2013

Calibration Due Date : 08/11/2013

Liquid Junction Error

Primary Standard Solution Used : Phosphate

Ref No. of Primary Solution: 003/5.2/001/15

Temperature of Solution : 20.0

$\Delta pH_{1/2}$ = +0.08

pH value of diluted buffer : 6.81

pH (S) = 6.881

ΔpH = pH(S) - pH of diluted buffer = 0.071 (Observed Deviation)

Liquid Junction Error (ΔpH_j) = $\Delta pH - \Delta pH_{1/2}$ = -0.009

Shift on Stirring

pH of buffer solution (with stirring), pH_s = 6.88

Shift on stirring, $\Delta pH_s = pH_s - pH(S) - \Delta pH_j$ = 0.008

Noise

Noise, ΔpH_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): 20.0 °C

Temperature record from the ATC (T_{ATC}): 19.7 °C

Temperature Difference, $|T_R - T_{ATC}|$ 0.3 °C

Acceptance Criteria

Performance Characteristic		Acceptable Range
Liquid Junction Error	ΔpHj	≤0.05
Shift on Stirring	ΔpHs	≤0.02
Noise	ΔpHn	≤0.02
Verifcation of ATC	Temperature Difference	≤0.5°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/007/003
Manufacturer : HANNA
Model No. : HI 8314
Serial No. : 674469
Date of Calibration : 09/11/2013
Calibration Due Date : 08/12/2013

Liquid Junction Error

Primary Standard Solution Used : Phosphate
Ref No. of Primary Solution: 003/5.2/001/16
Temperature of Solution : 20.2
$\Delta pH_{½}$ = +0.08
pH value of diluted buffer : 6.80
pH (S) = 6.881
ΔpH = pH(S) - pH of diluted buffer = 0.081 (Observed Deviation)
Liquid Junction Error (ΔpH_j) = $\Delta pH - \Delta pH_{½}$ = 0.001

Shift on Stirring

pH of buffer solution (with stirring), pH_s = 6.89
Shift on stirring, $\Delta pH_s = pH_s - pH(S) - \Delta pH_j$ = 0.008

Noise

Noise, ΔpH_n = difference between max and min reading : 0.00

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008
Temperature record from the reference thermometer (T_R): 20.2 °C
Temperature record from the ATC (T_{ATC}): 19.8 °C
Temperature Difference, $|T_R - T_{ATC}|$ 0.4 °C

Acceptance Criteria

Performance Characteristic		Acceptable Range
Liquid Junction Error	ΔpHj	≤0.05
Shift on Stirring	ΔpHs	≤0.02
Noise	ΔpHn	≤0.02
Verifcation of ATC	Temperature Difference	≤0.5°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.	:	ET/EW/008/006	Manufacturer	:	YSI
Model No.	:	Pro 2030	Serial No.	:	12A 100554
Date of Calibration	:	19/09/2013	Calibration Due Date	:	18/12/2013

Temperature Verification

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

Ref. No. of Water Bath : ---

	Temperature (°C)			
Reference Thermometer reading	Measured	20.1	Corrected	19.8
DO Meter reading	Measured	19.6	Difference	0.2

Standardization of sodium thiosulphate ($Na_2S_2O_3$) solution

Reagent No. of $Na_2S_2O_3$ titrant	CPE/012/4.5/001/7	Reagent No. of 0.025N $K_2Cr_2O_7$	CPE/012/4.4/001/~~19~~ 21 19/09/2013

	Trial 1	Trial 2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.50	15.00
Final Vol. of $Na_2S_2O_3$ (ml)	10.95	25.50
Vol. of $Na_2S_2O_3$ used (ml)	10.45	10.50
Normality of $Na_2S_2O_3$ solution (N)	0.02392	0.02381
Average Normality (**N**) of $Na_2S_2O_3$ solution (N)	0.02387	
Acceptance criteria, Deviation	Less than ± 0.001N	

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

Lineality Checking

*Determination of dissolved oxygen content by Winkler Titration **

Purging Time (min)	2		5		10	
Trial	1	2	1	2	1	2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	11.20	22.50	0.00	8.10	12.90
Final Vol. of $Na_2S_2O_3$ (ml)	11.20	22.50	30.40	8.10	12.90	17.80
Vol. (**V**) of $Na_2S_2O_3$ used (ml)	11.20	11.30	7.90	8.10	4.80	4.90
Dissolved Oxygen (**DO**), mg/L	7.18	7.24	5.06	5.19	3.08	3.14
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	7.10	7.30	7.20	7.18	7.24	7.21	0.14
5	5.13	5.52	5.33	5.06	5.19	5.13	3.82
10	3.09	3.31	3.20	3.08	3.14	3.11	2.85
Linear regression coefficient				0.9979			

Form E/CE/R/12 Issue 8 (2/2) [05/13]

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/012/4.7/002/09	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/09

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

Salinity (ppt)	10		30	
Trial	1	2	1	2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	11.80	24.00	35.10
Final Vol. of $Na_2S_2O_3$ (ml)	11.80	24.00	35.10	46.40
Vol. (**V**) of $Na_2S_2O_3$ used (ml)	11.80	12.20	11.10	11.30
Dissolved Oxygen (**DO**), mg/L	7.56	7.82	7.11	7.24
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	7.65	7.88	7.77	7.56	7.82	7.69	1.03
30	7.03	7.15	7.09	7.11	7.24	7.18	1.26

Acceptance Criteria

(1) Differenc 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 : 19/09/2012

Due Date : 18/12/2013

Ref. No. of Salinity Standard used (30ppt)	S/001/5

Salinity Standard (ppt)	Measured Salinity (ppt)	Difference %
30.0	31.8	5.83

Acceptance Criteria

Difference : <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 : __________

MetPak II™

Product Test Report

Product Tested: MetPak
Part Number: 1723-1B-2-111
Serial Number: 13130002
Test Date: 26/03/2013
Location: Gill Instruments Ltd

GILL ensures that quality is inherent in all aspects of their activities and ensures that compliance with BS EN ISO9001: 2008 is maintained.

This report certifies that the above instrument has been tested in accordance with Gill internal procedures

Results

Test	Limits	Results
Wind Still Air Test (Zero Wind Speed)	Pass/Fail	Pass
Wind Tunnel Test (12m/s nominal)	Pass/Fail	Pass
Pressure Sensor (Comparison DPI 142)	Pass/Fail	Pass
Temperature Sensor (Comparison HC2-S (SCS certified))	Pass/Fail	Pass
Humidity Sensor (Comparison HC2-S (SCS certified))	Pass/Fail	Pass

Wind sensor generic calibration is traceable to the University of Southampton wind tunnel and Gill instrumentation is maintained in accordance with UKAS.

Comparisons for Temperature, Humidity and Pressure are done against reference UKAS traceable instruments. The reference system numbers of these instruments are listed above.

All tests have been successfully completed

On behalf of Gill Instruments Ltd

Tony Raine
Quality Control

2002-0396 Issue 1

WATER

Certification of Quality

This product has been tested in accordance with procedures established through Global Water Instrumentation's Quality Management System. This product meets or exceeds its manufacturing acceptance criteria.

ITEM DESCRIPTION:	Wind Direction
MODEL NAME/ NUMBER:	WE570
PART NUMBER:	ED0000
SENSOR RANGE:	0-360 °
SENSOR OUTPUT:	4.01-20.03 mA
ACCURACY:	1% of full scale
POWER REQUIRED	10-36 VDC
SERIAL NUMBER:	1337005143
CABLE LENGTH:	25 ft
CERTIFICATES:	CE Compliant

Technician: Wright, Jess **Date:** 9/12/2013

NOT Global Water Instrumentation warrants that its products are free from defects in material & workmanship under normal use & service for a period of one year from date of original shipment from factory. Repaired components are warranted for a period of 90 days from shipment. Contact us for complete warranty details.

Global Water
a xylem brand

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at 1-800-876-1172
International: 1-979-690-5560
Fax: 1-979-690-0440
Email: globalw@globalw.com

Visit our online catalog at
www.globalw.com
Our Service Address
151 Graham Rd
College Station, TX 77845

Certification of Quality

This product has been tested in accordance with procedures established through Global Water Instrumentation's Quality Management System. This product meets or exceeds its manufacturing acceptance criteria.

ITEM DESCRIPTION:	Wind Speed Sensor
MODEL NAME/ NUMBER:	WE550
PART NUMBER:	EC0000
SENSOR RANGE:	0-110 MPH
SENSOR OUTPUT:	4.00-19.91 mA
ACCURACY:	.2 MPH over the range 11 to 55 MPH
POWER REQUIRED	10-36 VDC
SERIAL NUMBER:	1337005099
CABLE LENGTH:	25 ft
CERTIFICATES:	CE Compliant

Contact Global Water for all your instrumentation needs:

- Water Level
- Water Flow
- Water Samplers
- Water Quality
- Weather
- Remote Monitoring
- Control

Technician: *Wright, Jess*

Date: 9/10/2013

NOT Global Water Instrumentation warrants that its products are free from defects in material & workmanship under normal use & service for a period of one year from date of original shipment from factory. Repaired components are warranted for a period of 90 days from shipment. Contact us for complete warranty details.

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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 2013

Air quality monitoring stations: ASR1, ASR5, ASR10, AQMS1, AQMS2

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-Nov	2-Nov
						1-hour TSP - 3 times 24-hour TSP - 1 time *Impact AQM*
3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov
				1-hour TSP - 3 times 24-hour TSP - 1 time *Impact AQM*		
10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov
			1-hour TSP - 3 times 24-hour TSP - 1 time *Impact AQM*			
17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov
		1-hour TSP - 3 times 24-hour TSP - 1 time *Impact AQM*				
24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov	30-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*	

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 2013)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	1-Nov	2-Nov
					WQM Mid-Ebb 11:15 (09:30 - 13:00) Mid-Flood 17:17 (15:32 - 19:02)	
3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov
	WQM Mid-Ebb 13:22 (11:37 - 15:07) Mid-Flood 18:53 (17:08 - 20:38)		**WQM** Mid-Flood 9:21 (07:36 - 11:06) Mid-Ebb 14:54 (13:09 - 16:39)		**WQM** Mid-Flood 11:17 (09:32 - 13:02) Mid-Ebb 16:37 (14:52 - 18:22)	
10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov
	WQM Mid-Flood 14:39 (12:54 - 16:24) Mid-Ebb 20:46 (19:01 - 22:31)		**WQM** Mid-Ebb 9:27 (07:42 - 11:12) Mid-Flood 16:08 (14:23 - 17:53)		**WQM** Mid-Ebb 11:13 (09:28 - 12:58) Mid-Flood 17:14 (15:29 - 18:59)	
17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov
	WQM Mid-Ebb 13:16 (11:31 - 15:01) Mid-Flood 18:40 (16:55 - 20:25)		**WQM** Mid-Flood 9:12 (07:27 - 10:57) Mid-Ebb 14:25 (12:40 - 16:10)		**WQM** Mid-Flood 10:31 (08:46 - 12:16) Mid-Ebb 15:34 (13:49 - 17:19)	
24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov	30-Nov
	WQM Mid-Flood 12:59 (11:14 - 14:44) Mid-Ebb 18:15 (16:38 - 19:51)		**WQM** Mid-Flood 14:36 (12:51 - 16:21) Mid-Ebb 21:04 (19:19 - 22:49)		**WQM** Mid-Ebb 9:39 (07:54 - 11:24) Mid-Flood 15:50 (14:05 - 17:35)	

HY/2012/08 - Tuen Mun - Chek Lap Kok Link
Northern Connection Sub-sea Tunnel Section
Impact Dolphin Monitoring Survey Monitoring Schedule - November 2013

Dolphin Monitoring Survey Locations: North West Lantau and North East Lantau

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-Nov	2-Nov
					Impact Dolphin Monitoring	
3-Nov	4-Nov	5-Nov	6-Nov	7-Nov	8-Nov	9-Nov
		Impact Dolphin Monitoring			**Impact Dolphin Monitoring**	
10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov
			Impact Dolphin Monitoring			
17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	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 Air Quality Impact Monitoring Schedule - December 2013

Air quality monitoring stations: ASR1, ASR5, ASR10, AQMS1, AQMS2

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

HY/2012/08 - Tuen Mun - Chek Lap Kok Link - Northern Connection Sub-sea Tunnel Section
Impact Marine Water Quality Monitoring (WQM) Schedule (December 2013)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Dec	02-Dec	03-Dec	04-Dec	05-Dec	06-Dec	07-Dec
	WQM Mid-Ebb 12:20 (10:35 - 14:05) Mid-Flood 17:44 (15:59 - 19:30)		**WQM** Mid-Ebb 13:55 (12:10 - 15:40) Mid-Flood 19:07 (17:22 - 20:52)		**WQM** Mid-Flood 10:09 (08:24 - 11:54) Mid-Ebb 15:32 (13:47 - 17:17)	
08-Dec	09-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec
	WQM Mid-Flood 12:48 (11:03 - 14:33) Mid-Ebb 18:48 (17:03 - 20:33)		**WQM** Mid-Flood 14:35 (12:50 - 16:20) Mid-Ebb 21:17 (19:32 - 23:02)		**WQM** Mid-Ebb 9:55 (08:10 - 11:40) Mid-Flood 15:59 (14:14 - 17:44)	
15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec
	WQM Mid-Ebb 12:21 (10:36 - 14:06) Mid-Flood 17:38 (15:53 - 19:23)		**WQM** Mid-Ebb 13:30 (11:45 - 15:15) Mid-Flood 18:42 (16:57 - 20:27)		**WQM** Mid-Flood 9:27 (07:42 - 11:12) Mid-Ebb 14:36 (12:51 - 16:21)	
22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec
	WQM Mid-Flood 11:06 (09:21 - 12:51) Mid-Ebb 16:32 (14:47 - 18:17)		**WQM** Mid-Flood 12:31 (10:46 - 14:16) Mid-Ebb 18:39 (16:54 - 20:24)		**WQM** Mid-Flood 14:05 (12:20 - 15:50) Mid-Ebb 21:04 (19:19 - 22:49)	
29-Dec	30-Dec	31-Dec				
	WQM Mid-Ebb 11:13 (09:28 - 12:58) Mid-Flood 16:30 (14:45 - 18:15)					

Appendix G

Impact Air Quality Monitoring Results

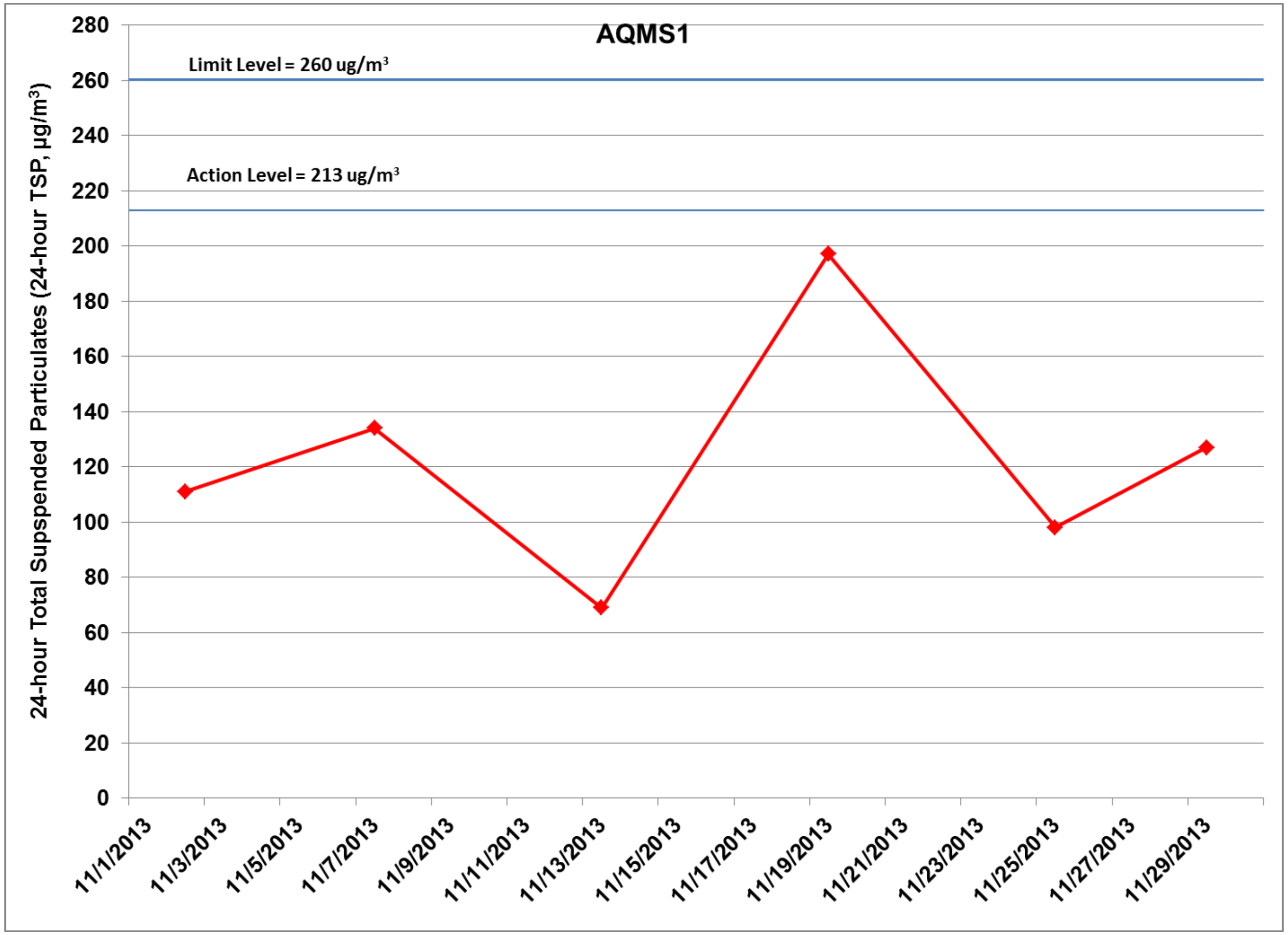


Figure G.1 Impact Monitoring – Mean Level of 24-hour Total Suspended Particulates (mg/L) at AQMS1 between 1 and 30 November 2013 during impact monitoring period.

Ref: *0212330_impact AQM_Graphs_rev a.xlsx*

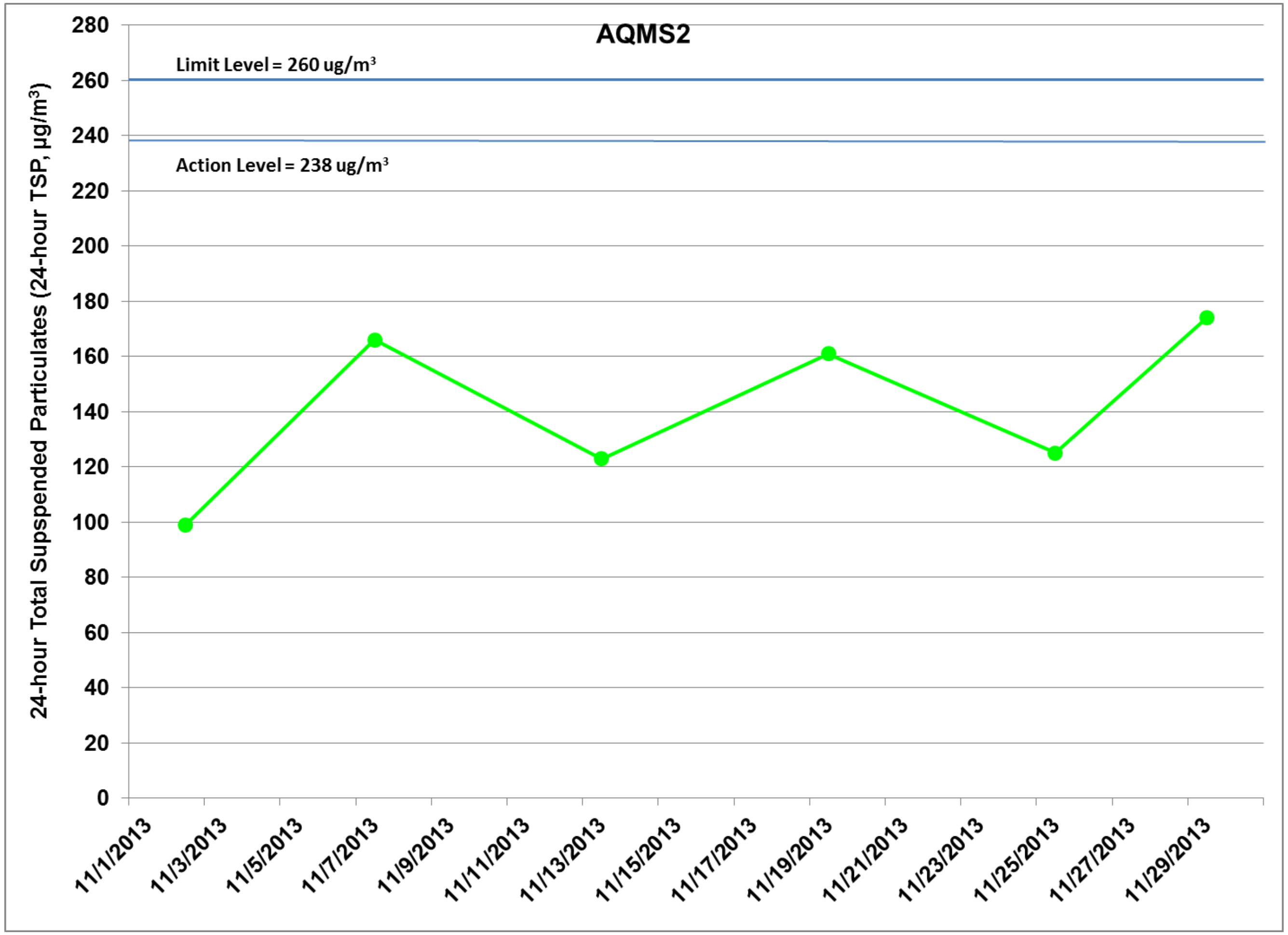


Figure G.2 Impact Monitoring – Mean Level of 24-hour Total Suspended Particulates (mg/L) at AQMS2 between 1 and 30 November 2013 during impact monitoring period.

Ref: ***0212330_impact AQM_Graphs_rev a.xlsx***

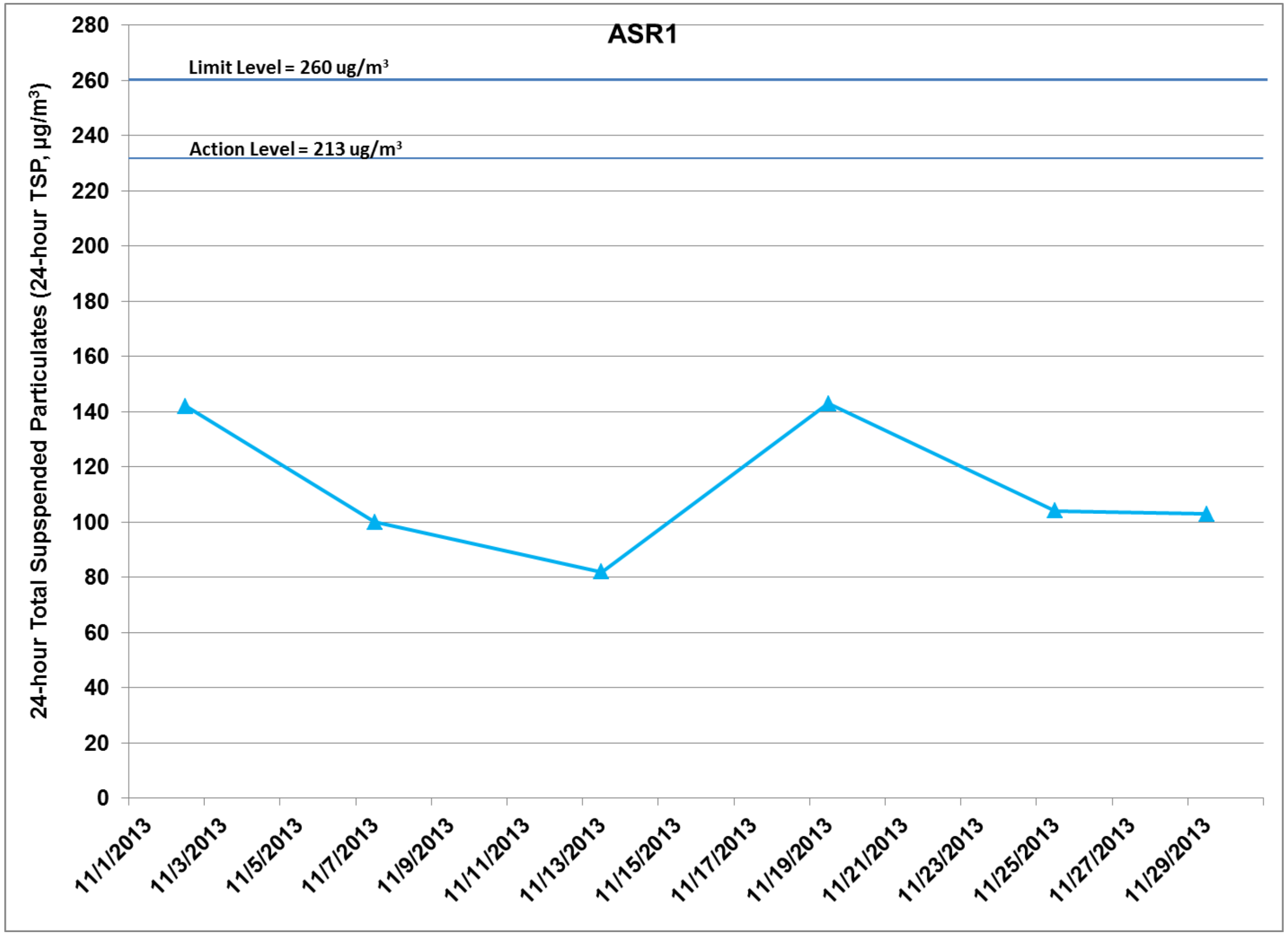


Figure G.3 Impact Monitoring – Mean Level of 24-hour Total Suspended Particulates (mg/L) at ASR1 between 1 and 30 November 2013 during impact monitoring period.

Ref: *0212330_impact AQM_Graphs_rev a.xlsx*

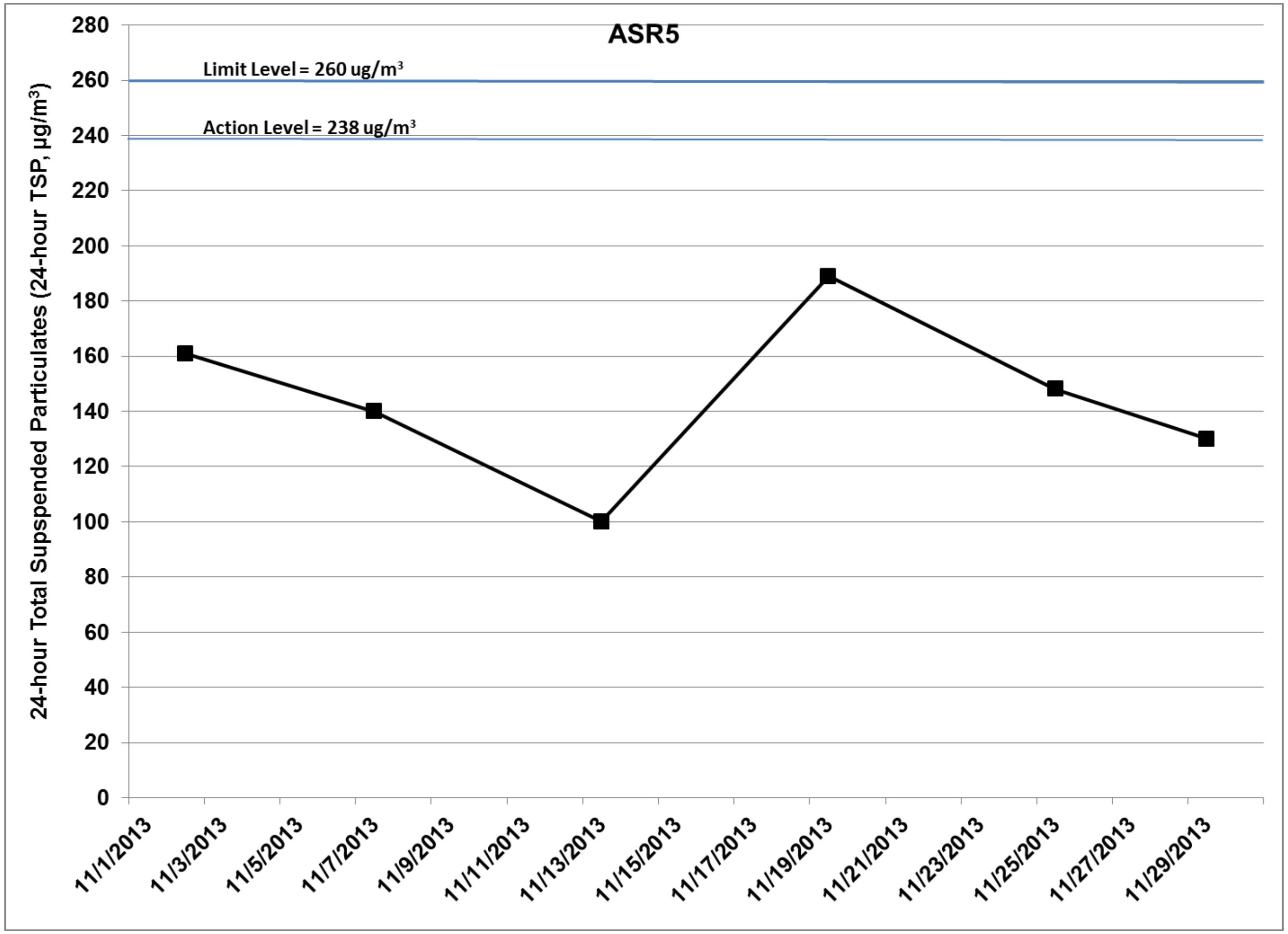


Figure G.4 Impact Monitoring – Mean Level of 24-hour Total Suspended Particulates (mg/L) at ASR5 between 1 and 30 November 2013 during impact monitoring period.

Ref: *0212330_impact AQM_Graphs_rev a.xlsx*

ERM

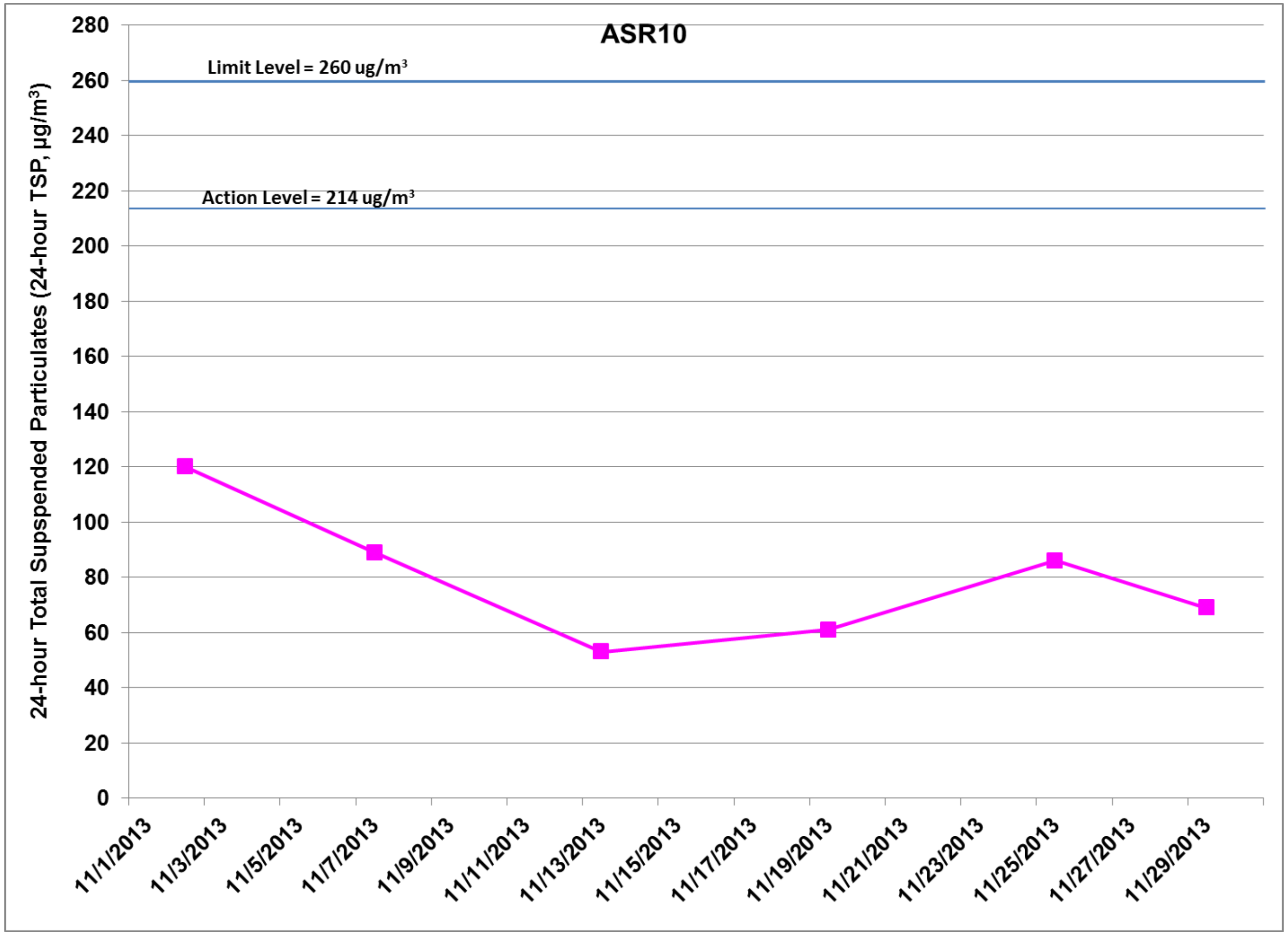


Figure G.5 Impact Monitoring – Mean Level of 24-hour Total Suspended Particulates (mg/L) at ASR10 between 1 and 30 November 2013 during impact monitoring period.

Ref: *0212330_impact AQM_Graphs_rev a.xlsx*

ERM

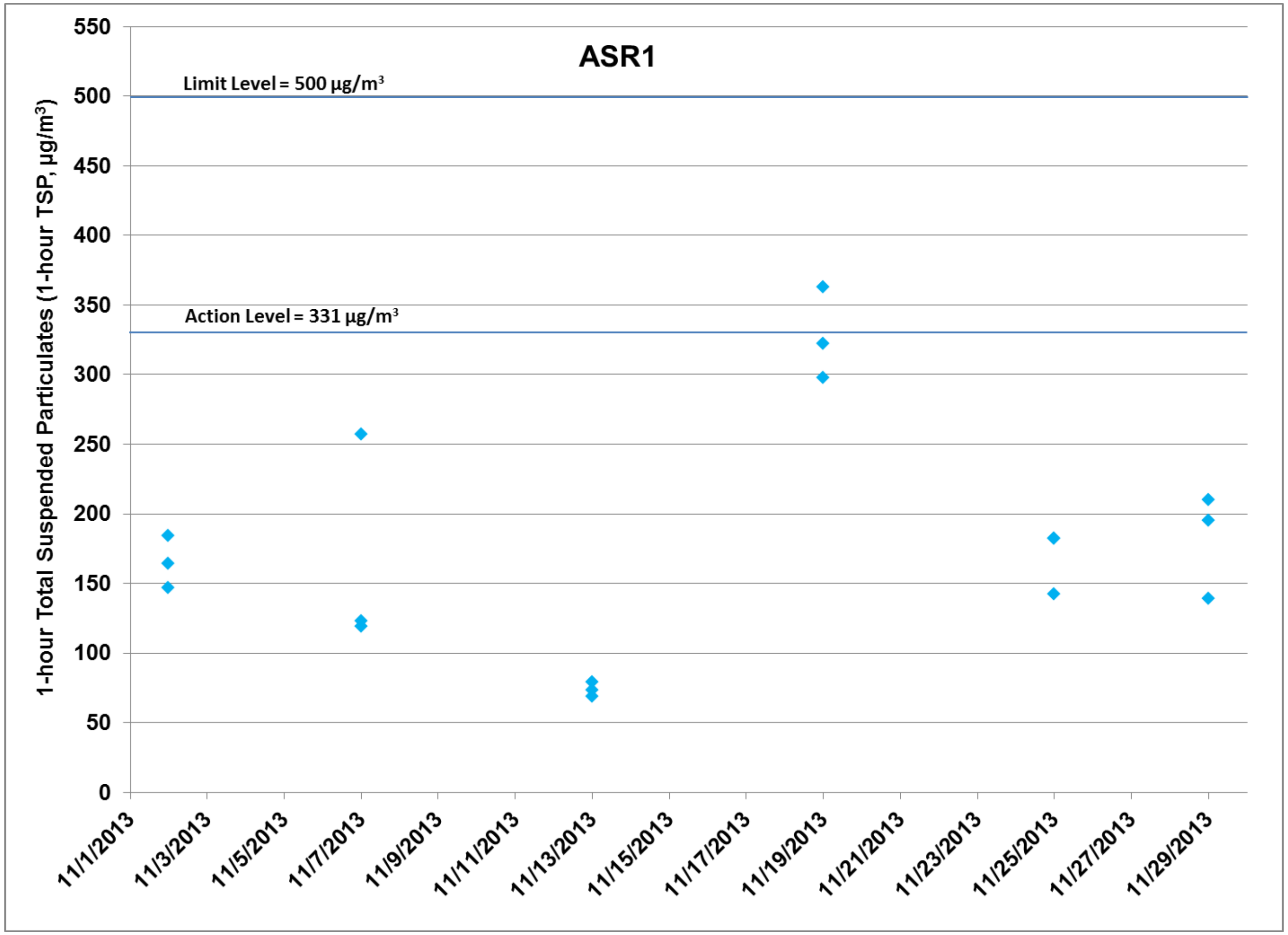


Figure G.6 Impact Monitoring – 1-hour Total Suspended Particulates (mg/L) at ASR1 between 1 and 30 November 2013 during impact monitoring period.

Ref: *0212330_impact AQM_Graphs_rev a.xlsx*

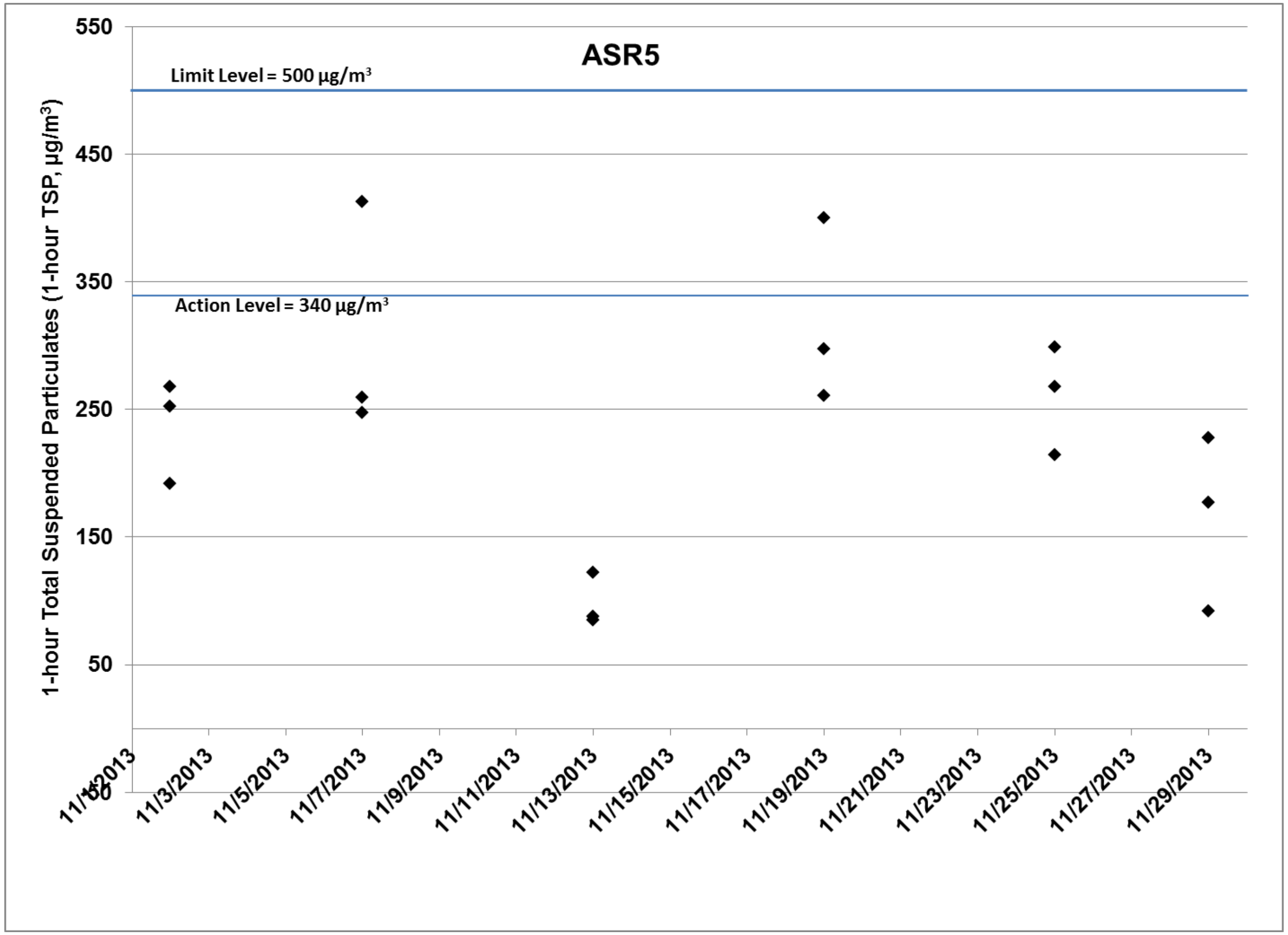


Figure G.7 Impact Monitoring – 1-hour Total Suspended Particulates (mg/L) at ASR5 between 1 and 30 November 2013 during impact monitoring period.

Ref: *0212330_impact AQM_Graphs_rev a.xlsx*

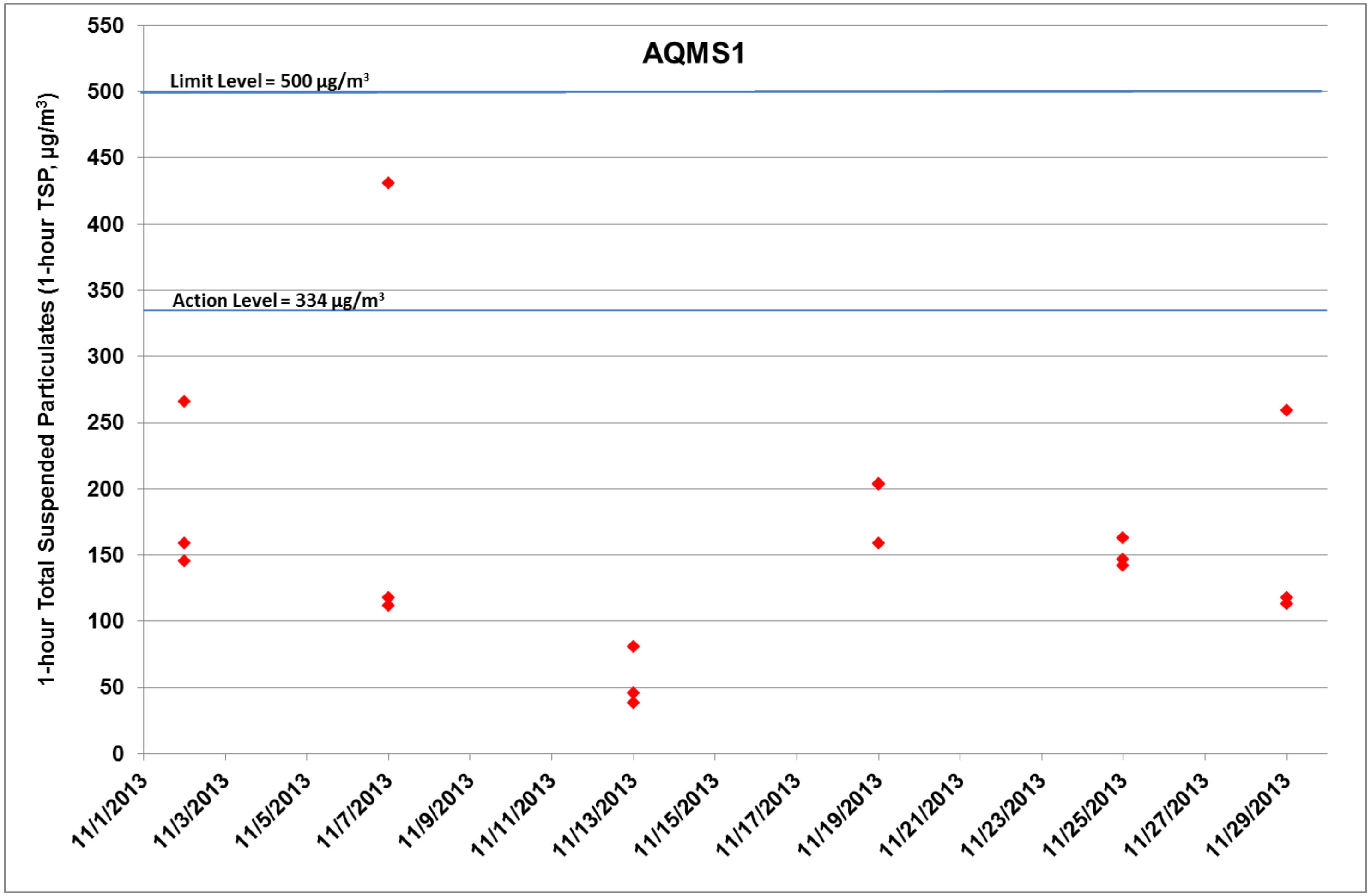


Figure G.8 Impact Monitoring – 1-hour Total Suspended Particulates (mg/L) at AQMS1 between 1 and 30 November 2013 during impact monitoring period.

Ref: ***0212330_impact AQM_Graphs_rev a.xlsx***

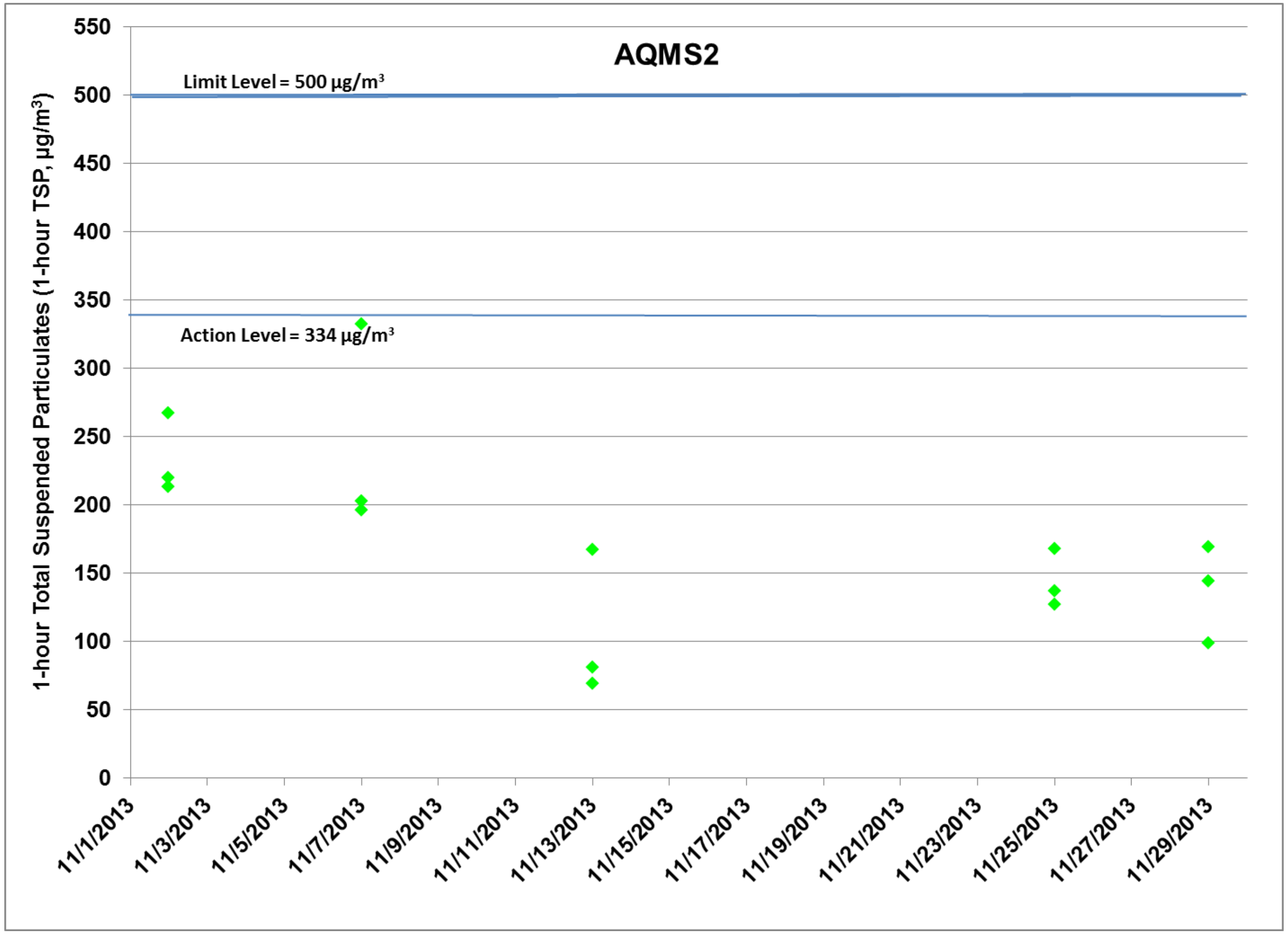


Figure G.9 Impact Monitoring – 1-hour Total Suspended Particulates (mg/L) at AQMS2 between 1 and 30 November 2013 during impact monitoring period.

Ref: 0212330_impact AQM_Graphs_rev a.xlsx

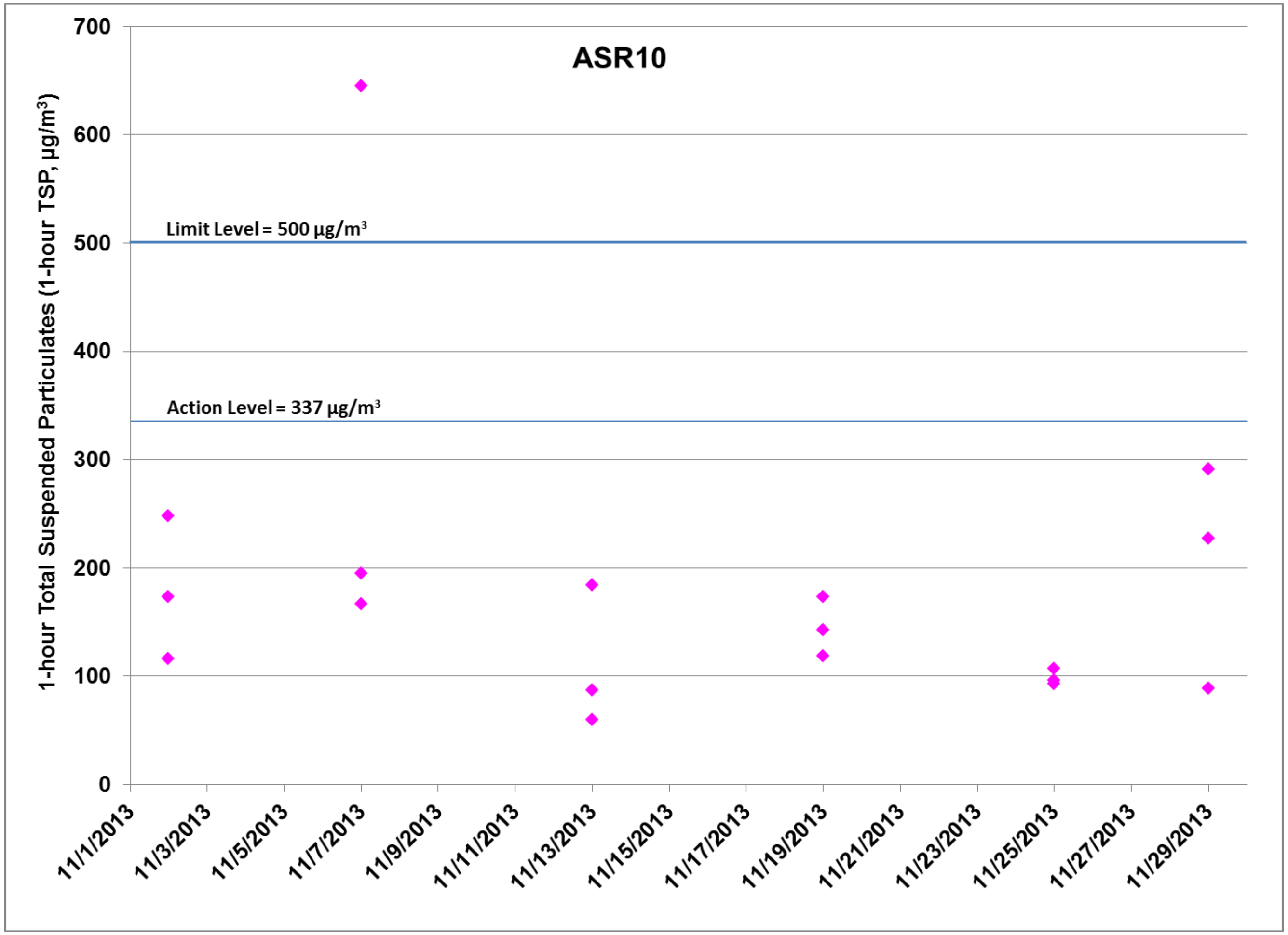


Figure G.10 Impact Monitoring – 1-hour Total Suspended Particulates (mg/L) at ASR10 between 1 and 30 November 2013 during impact monitoring period.

Ref: *0212330_impact AQM_Graphs_rev a.xlsx*

ERM

Project	Works	Date	Station	Weather	Start time	End Time (hh:mm, 24hour)	Parameters	Results	units
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	08:08	09:08	1-hour TSP	213	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	09:10	10:10	1-hour TSP	267	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	10:12	11:12	1-hour TSP	220	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	08:40	09:40	1-hour TSP	145	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	09:40	10:40	1-hour TSP	266	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	10:40	11:40	1-hour TSP	159	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	08:00	09:00	1-hour TSP	173	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	09:02	10:02	1-hour TSP	248	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	10:04	11:04	1-hour TSP	116	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	08:30	09:30	1-hour TSP	164	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	09:32	10:32	1-hour TSP	184	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	10:34	11:34	1-hour TSP	147	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	08:20	09:20	1-hour TSP	192	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	09:22	10:22	1-hour TSP	268	μg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	10:24	11:24	1-hour TSP	252	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	08:30	09:30	1-hour TSP	257	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	09:32	10:32	1-hour TSP	119	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	10:34	11:34	1-hour TSP	123	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	08:20	09:20	1-hour TSP	413	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	09:22	10:22	1-hour TSP	247	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	10:24	11:24	1-hour TSP	259	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	08:08	09:08	1-hour TSP	332	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	09:10	10:10	1-hour TSP	203	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	10:12	11:12	1-hour TSP	196	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR10	S	08:00	09:00	1-hour TSP	195	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR10	S	09:02	10:02	1-hour TSP	645	μg/m^3

TMCLKL	HY/2012/08	2013/11/07	ASR10	S	10:04	11:04	1-hour TSP	167 μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	08:40	09:40	1-hour TSP	431 μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	09:42	10:42	1-hour TSP	112 μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	10:44	11:44	1-hour TSP	118 μg/m^3
TMCLKL	HY/2012/08	2013/11/13	AQMS1	S	10:47	11:47	1-hour TSP	46 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR1	S	08:35	09:35	1-hour TSP	139 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR1	S	09:37	10:37	1-hour TSP	195 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR1	S	10:39	11:39	1-hour TSP	210 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR5	S	08:26	09:26	1-hour TSP	92 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR5	S	09:28	10:28	1-hour TSP	177 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR5	S	10:30	11:30	1-hour TSP	228 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	AQMS2	S	08:16	09:16	1-hour TSP	99 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	AQMS2	S	09:18	10:18	1-hour TSP	169 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	AQMS2	S	10:20	11:20	1-hour TSP	144 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR10	S	08:06	09:06	1-hour TSP	227 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR10	S	09:08	10:08	1-hour TSP	89 μg/m^3
TMCLKL	HY/2012/08	2013/11/29	ASR10	S	10:10	11:10	1-hour TSP	291 μg/m^3

Project	Works	Date	Station	Weather	Start time (hh:mm, 24hour)	End Time (hh:mm, 24hour)	Parameters	Results	units	Elapsed Time Reading		Total sampling time (min)	Flow rate (m^3/min)			Total Volume (m^3)	Filter ID	Filter Weight (g)	
										Initial	Final		Initial	Final	Average			Initial	Final
TMCLKL	HY/2012/08	2013/11/02	ASR6	S	11:14	11:14	24-hour TSP	99	μg/m^3	6587.62	6611.62	1440	1.23	1.23	1.23	1771.2	050591	2.7851	2.9610
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	09:46	09:46	24-hour TSP	111	μg/m^3	19720.10	19744.10	1440	1.28	1.28	1.28	1843.2	050583	2.7273	2.9310
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	11:06	11:06	24-hour TSP	120	μg/m^3	15548.65	15572.65	1440	1.25	1.25	1.25	1800.0	050599	2.7486	2.9646
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	11:36	11:36	24-hour TSP	142	μg/m^3	7983.17	8007.17	1440	1.37	1.37	1.37	1972.8	050595	2.7385	3.0388
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	11:26	11:26	24-hour TSP	161	μg/m^3	18012.90	18036.90	1440	1.27	1.27	1.27	1828.8	050587	2.7297	3.0236
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	11:36	11:36	24-hour TSP	100	μg/m^3	8010.17	8034.17	1440	1.37	1.37	1.37	1972.8	050616	2.7734	2.9707
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	11:26	11:26	24-hour TSP	140	μg/m^3	18039.90	18063.90	1440	1.27	1.27	1.27	1828.8	050611	2.7684	3.0244
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	11:14	11:14	24-hour TSP	166	μg/m^3	6614.62	6638.62	1440	1.23	1.23	1.23	1771.2	050607	2.7554	3.0486
TMCLKL	HY/2012/08	2013/11/07	ASR10	S	11:06	11:06	24-hour TSP	89	μg/m^3	15575.65	15599.65	1440	1.25	1.25	1.25	1800.0	050603	2.7669	2.9266
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	11:46	11:46	24-hour TSP	134	μg/m^3	19747.10	19771.10	1440	1.28	1.28	1.28	1843.2	050620	2.7514	2.9977
TMCLKL	HY/2012/08	2013/11/13	AQMS1	S	11:49	11:49	24-hour TSP	69	μg/m^3	19774.10	19798.10	1440	1.28	1.28	1.28	1843.2	050644	2.7200	2.8470
TMCLKL	HY/2012/08	2013/11/13	ASR10	S	11:06	11:06	24-hour TSP	53	μg/m^3	15602.65	15626.65	1440	1.25	1.25	1.25	1800.0	050643	2.7292	2.8247
TMCLKL	HY/2012/08	2013/11/13	AQMS2	S	11:16	11:16	24-hour TSP	123	μg/m^3	6641.62	6665.62	1440	1.23	1.23	1.23	1771.2	050633	2.7320	2.9492
TMCLKL	HY/2012/08	2013/11/13	ASR5	S	11:26	11:26	24-hour TSP	100	μg/m^3	18066.90	18090.90	1440	1.27	1.27	1.27	1828.8	050628	2.7344	2.9171
TMCLKL	HY/2012/08	2013/11/13	ASR1	S	11:38	11:38	24-hour TSP	82	μg/m^3	8037.17	8061.17	1440	1.37	1.37	1.37	822.0	050636	2.7312	2.7372
TMCLKL	HY/2012/08	2013/11/19	AQMS1	S	11:48	11:48	24-hour TSP	197	μg/m^3	19801.10	19825.10	1440	1.28	1.28	1.28	1843.2	050660	2.7124	3.0746
TMCLKL	HY/2012/08	2013/11/19	ASR1	S	11:27	11:27	24-hour TSP	143	μg/m^3	8064.17	8088.17	1440	1.37	1.37	1.37	1972.8	050652	2.7052	2.9879
TMCLKL	HY/2012/08	2013/11/19	ASR5	S	11:26	11:26	24-hour TSP	189	μg/m^3	18093.90	18117.90	1440	1.27	1.27	1.27	1828.8	050648	2.7374	3.0839
TMCLKL	HY/2012/08	2013/11/19	ASR6	S	11:16	11:16	24-hour TSP	174	μg/m^3	6668.62	6692.62	1440	1.23	1.23	1.23	1771.2	050656	2.6993	3.0070
TMCLKL	HY/2012/08	2013/11/19	ASR10	S	11:06	11:06	24-hour TSP	61	μg/m^3	15629.65	15653.65	1440	1.25	1.25	1.25	1800.0	050661	2.7059	2.8153
TMCLKL	HY/2012/08	2013/11/25	AQMS1	S	11:55	11:55	24-hour TSP	98	μg/m^3	19828.10	19852.10	1440	1.18	1.18	1.18	1843.2	050797	2.7321	2.9130
TMCLKL	HY/2012/08	2013/11/25	ASR1	S	11:43	11:43	24-hour TSP	104	μg/m^3	8091.17	8115.17	1440	1.37	1.37	1.37	1972.8	050796	2.7677	2.9724
TMCLKL	HY/2012/08	2013/11/25	ASR5	S	11:31	11:31	24-hour TSP	148	μg/m^3	18120.90	18144.90	1440	1.27	1.27	1.27	1828.8	050795	2.7815	3.0528
TMCLKL	HY/2012/08	2013/11/25	AQMS2	S	11:22	11:22	24-hour TSP	161	μg/m^3	6695.62	6719.62	1440	1.23	1.23	1.23	1771.2	050794	2.7940	3.0792
TMCLKL	HY/2012/08	2013/11/25	ASR10	S	11:11	11:11	24-hour TSP	86	μg/m^3	15656.65	15680.65	1440	1.25	1.25	1.25	1800.0	050793	2.7625	2.9169
TMCLKL	HY/2012/08	2013/11/29	AQMS1	S	11:53	11:53	24-hour TSP	127	μg/m^3	14855.10	19879.10	1440	1.28	1.28	1.28	1843.2	050817	2.6510	2.8859
TMCLKL	HY/2012/08	2013/11/29	ASR1	S	11:41	11:41	24-hour TSP	103	μg/m^3	8118.17	8142.17	1440	1.37	1.37	1.37	1972.8	050813	2.7672	2.9711
TMCLKL	HY/2012/08	2013/11/29	ASR5	S	11:32	11:32	24-hour TSP	130	μg/m^3	18147.90	18171.90	1440	1.27	1.28	1.27	1828.8	050809	2.7879	3.0264
TMCLKL	HY/2012/08	2013/11/29	AQMS2	S	11:24	11:24	24-hour TSP	125	μg/m^3	6722.62	6746.62	1440	1.23	1.23	1.23	1771.2	050805	2.7589	2.9808
TMCLKL	HY/2012/08	2013/11/29	ASR10	S	11:12	11:12	24-hour TSP	69	μg/m^3	15683.65	15707.65	1440	1.25	1.25	1.25	1800.0	050801	2.7629	2.8864

* Note:

S = Sunny/Fine; C = Cloudy/Overcast; R = Rainy

Appendix H

Meteorological Data

Meteorological Data for Impact Monitoring in the reporting period

Date	Time (24hrs)	Average of Wind Direction (degree)	Average of Wind Speed (m/s)
2-Nov-13	0:00	157	0.58
2-Nov-13	1:00	189	0.96
2-Nov-13	2:00	256	0.79
2-Nov-13	3:00	181	0.70
2-Nov-13	4:00	167	1.71
2-Nov-13	5:00	166	1.95
2-Nov-13	6:00	200	1.16
2-Nov-13	7:00	197	1.58
2-Nov-13	8:00	154	3.05
2-Nov-13	9:00	136	3.09
2-Nov-13	10:00	135	2.65
2-Nov-13	11:00	129	2.54
2-Nov-13	12:00	167	3.25
2-Nov-13	13:00	134	2.88
2-Nov-13	14:00	157	2.39
7-Nov-13	0:00	179	0.38
7-Nov-13	1:00	231	0.35
7-Nov-13	2:00	161	0.44
7-Nov-13	3:00	198	0.51
7-Nov-13	4:00	271	0.49
7-Nov-13	5:00	176	0.37
7-Nov-13	6:00	110	0.95
7-Nov-13	7:00	104	1.60
7-Nov-13	8:00	124	1.60
7-Nov-13	9:00	130	1.83
7-Nov-13	10:00	162	1.07
7-Nov-13	11:00	167	1.22
7-Nov-13	12:00	142	1.48
7-Nov-13	13:00	158	1.43
7-Nov-13	14:00	166	1.38
7-Nov-13	15:00	161	1.38
13-Nov-13	0:00	172	0.57
13-Nov-13	1:00	200	0.49
13-Nov-13	2:00	181	0.75
13-Nov-13	3:00	148	1.40
13-Nov-13	4:00	101	2.42
13-Nov-13	5:00	105	3.22
13-Nov-13	6:00	104	3.14
13-Nov-13	7:00	96	3.08
13-Nov-13	8:00	98	3.49
13-Nov-13	9:00	100	3.23
13-Nov-13	10:00	128	2.37
13-Nov-13	11:00	145	1.48
13-Nov-13	12:00	126	2.13
13-Nov-13	13:00	139	1.72
13-Nov-13	14:00	141	1.61
13-Nov-13	15:00	133	1.55
13-Nov-13	16:00	177	1.44
13-Nov-13	17:00	230	1.07

13-Nov-13	18:00	181	1.22
13-Nov-13	19:00	168	1.30
13-Nov-13	20:00	173	1.37
13-Nov-13	21:00	214	0.94
13-Nov-13	22:00	186	0.56
13-Nov-13	23:00	191	0.51
19-Nov-13	0:00	227	0.47
19-Nov-13	1:00	174	0.83
19-Nov-13	2:00	226	0.83
19-Nov-13	3:00	152	1.41
19-Nov-13	4:00	129	1.67
19-Nov-13	5:00	131	1.68
19-Nov-13	6:00	94	1.62
19-Nov-13	7:00	109	1.90
19-Nov-13	8:00	106	1.68
19-Nov-13	9:00	133	1.25
19-Nov-13	10:00	104	1.24
19-Nov-13	11:00	134	1.18
19-Nov-13	12:00	150	1.22
19-Nov-13	13:00	97	1.47
19-Nov-13	14:00	99	1.52
19-Nov-13	15:00	107	1.84
19-Nov-13	16:00	104	1.98
19-Nov-13	17:00	95	1.59
19-Nov-13	18:00	86	1.94
19-Nov-13	19:00	97	1.42
19-Nov-13	20:00	108	0.98
19-Nov-13	21:00	100	1.62
19-Nov-13	22:00	132	1.17
19-Nov-13	23:00	88	1.45
25-Nov-13	0:00	1	255.41
25-Nov-13	1:00	1	273.68
25-Nov-13	2:00	1	268.94
25-Nov-13	3:00	1	284.78
25-Nov-13	4:00	1	252.23
25-Nov-13	5:00	2	134.73
25-Nov-13	6:00	2	146.85
25-Nov-13	7:00	2	144.40
25-Nov-13	8:00	2	118.66
25-Nov-13	9:00	2	143.84
25-Nov-13	10:00	2	164.97
25-Nov-13	11:00	2	139.09
25-Nov-13	12:00	2	113.97
25-Nov-13	13:00	2	138.68
25-Nov-13	14:00	2	157.53
25-Nov-13	15:00	2	149.93
25-Nov-13	16:00	2	199.38
25-Nov-13	17:00	1	264.57
25-Nov-13	18:00	1	271.31
25-Nov-13	19:00	2	158.95
25-Nov-13	20:00	2	137.42

25-Nov-13	21:00	2	165.13
25-Nov-13	22:00	3	103.60
25-Nov-13	23:00	3	101.37
29-Nov-13	0:00	2	156.99
29-Nov-13	1:00	2	135.45
29-Nov-13	2:00	2	137.86
29-Nov-13	3:00	3	115.73
29-Nov-13	4:00	3	129.05
29-Nov-13	5:00	3	128.93
29-Nov-13	6:00	2	160.10
29-Nov-13	7:00	2	135.76
29-Nov-13	8:00	3	137.70
29-Nov-13	9:00	3	114.50
29-Nov-13	10:00	4	139.18
29-Nov-13	11:00	3	112.70
29-Nov-13	12:00	2	106.78
29-Nov-13	13:00	2	109.41
29-Nov-13	14:00	1	171.41
29-Nov-13	15:00	2	141.41
29-Nov-13	16:00	2	169.73
29-Nov-13	17:00	1	267.27
29-Nov-13	18:00	2	192.94
29-Nov-13	19:00	1	177.77
29-Nov-13	20:00	2	181.53
29-Nov-13	21:00	2	138.63
29-Nov-13	22:00	2	162.69
29-Nov-13	23:00	1	102.01

Appendix I

Impact Water Quality Monitoring Results

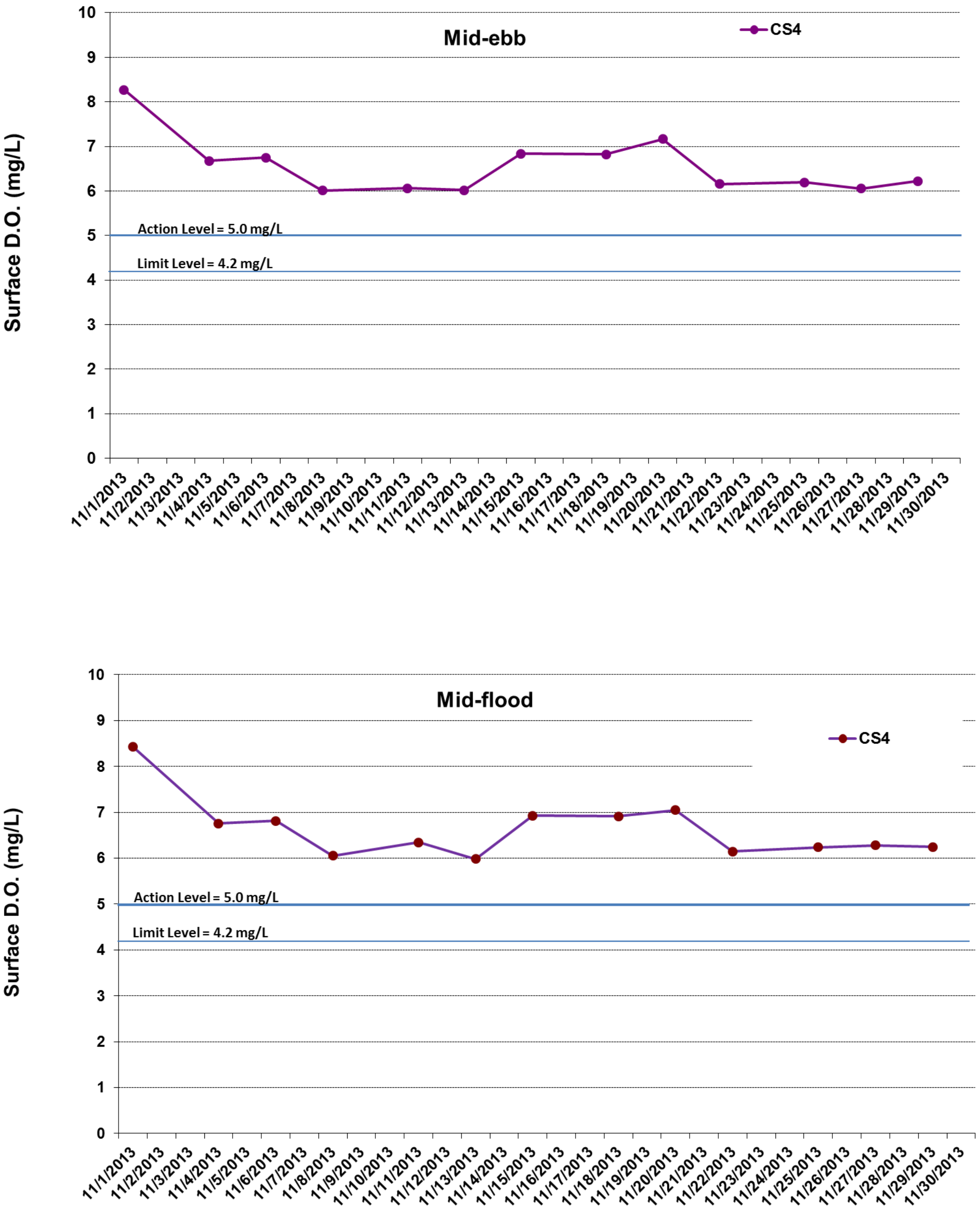
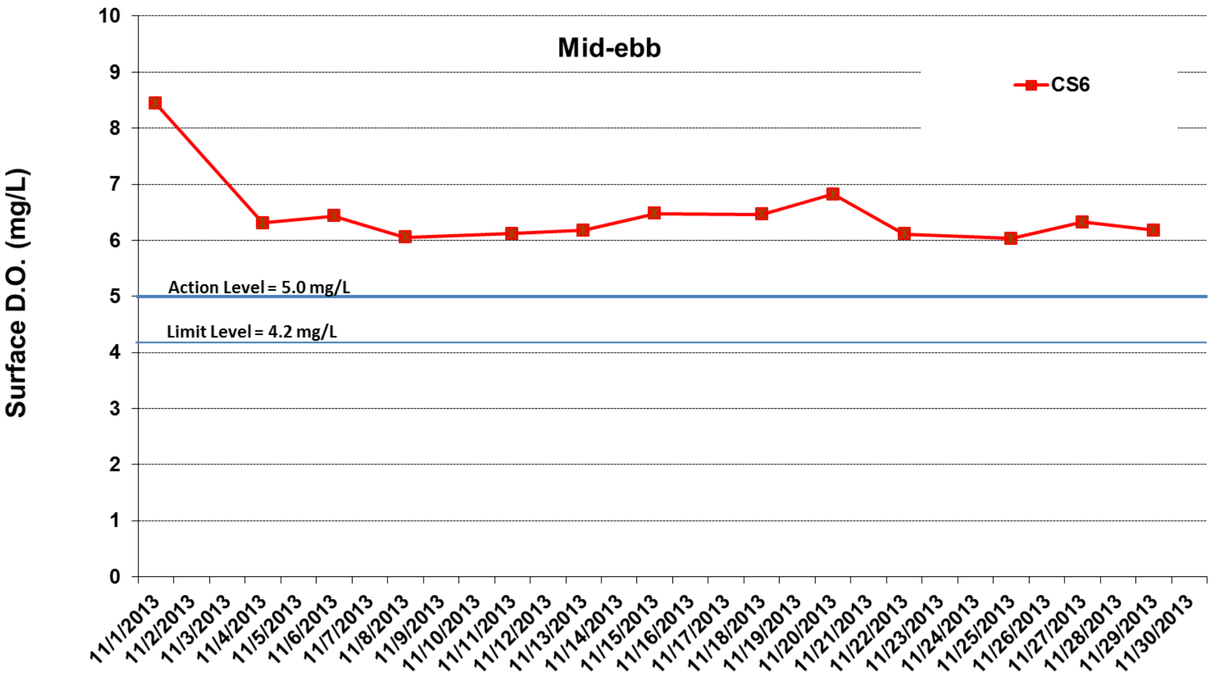


Figure I1 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at CS4.

ERM



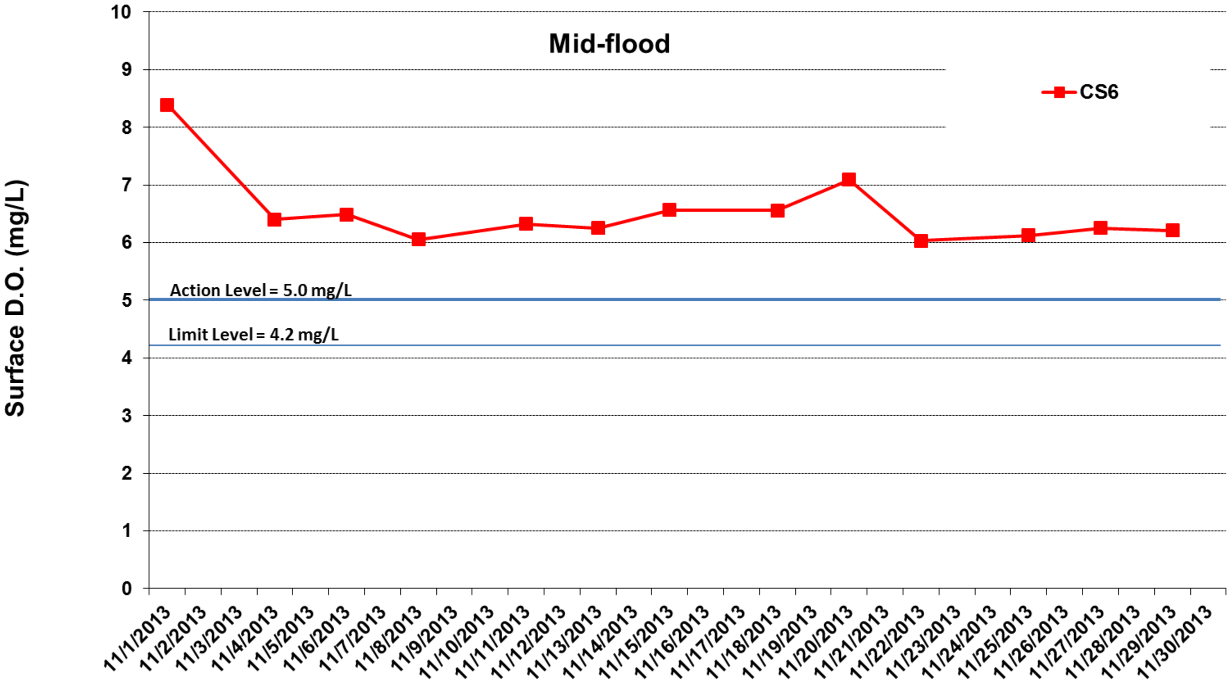
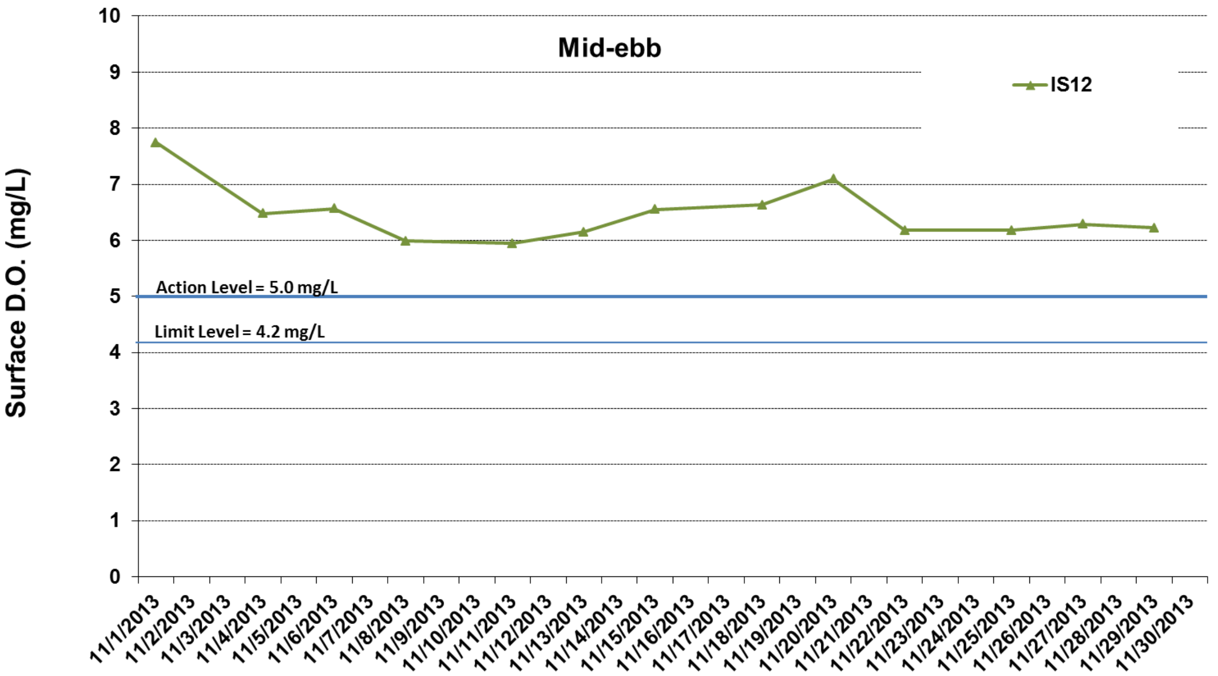


Figure I2 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at CS6.

ERM



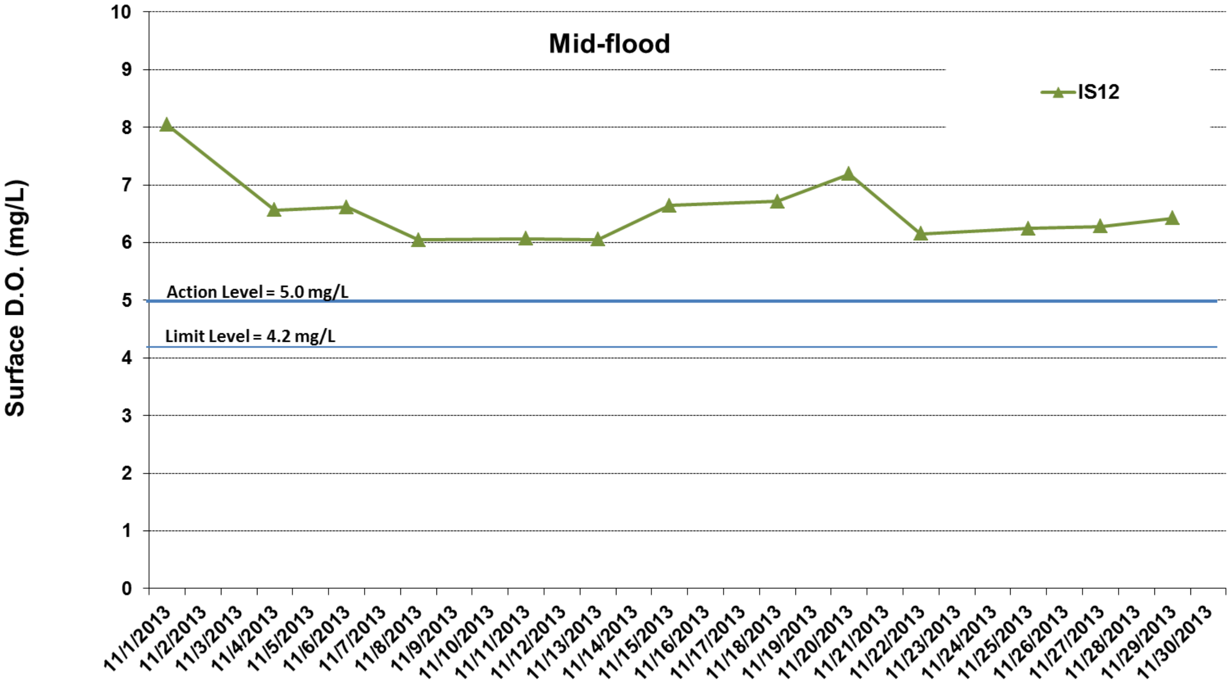
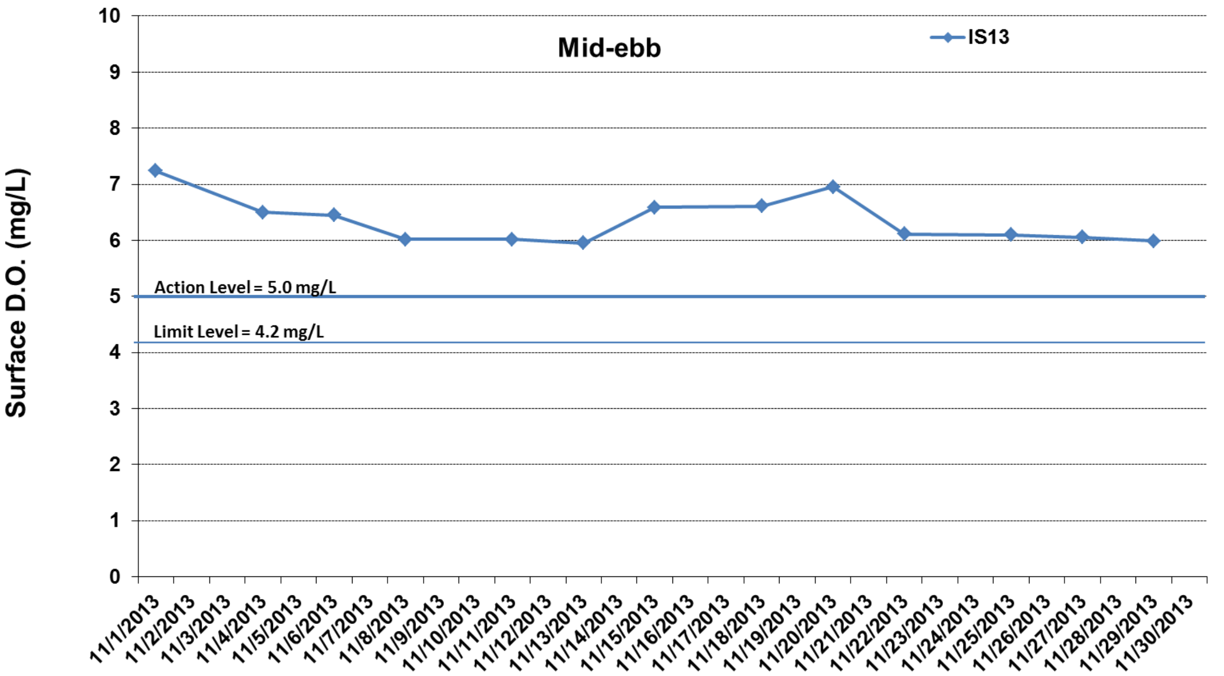


Figure I3 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at IS12.

ERM



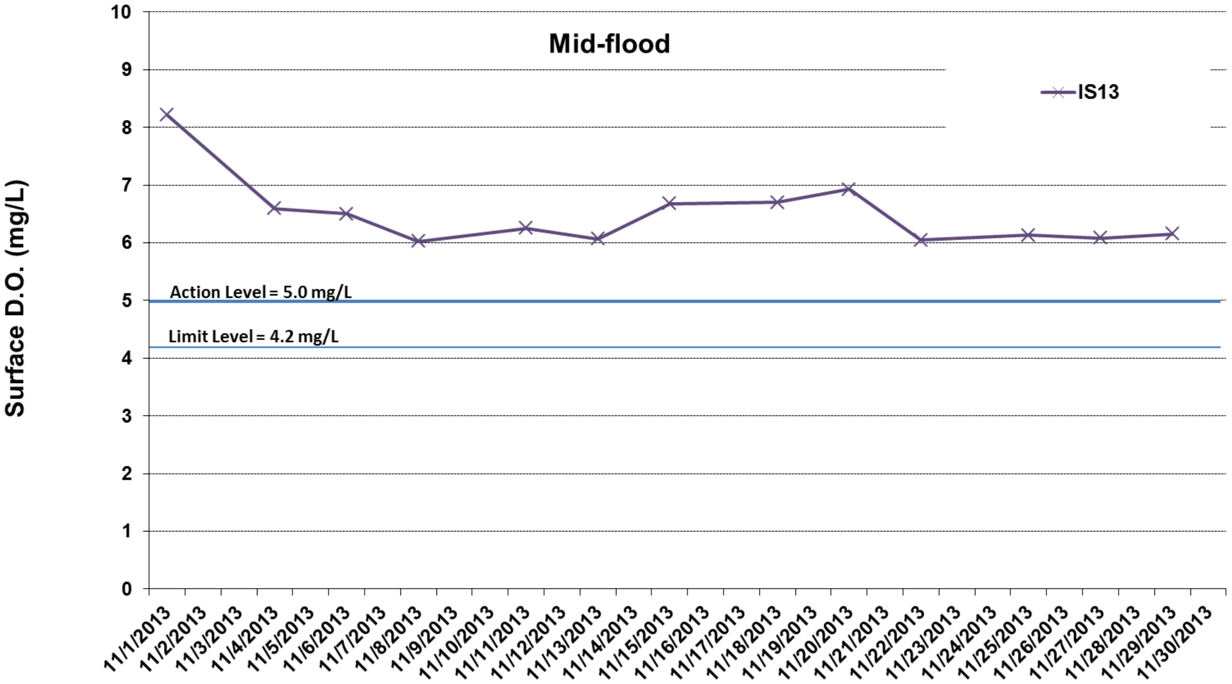
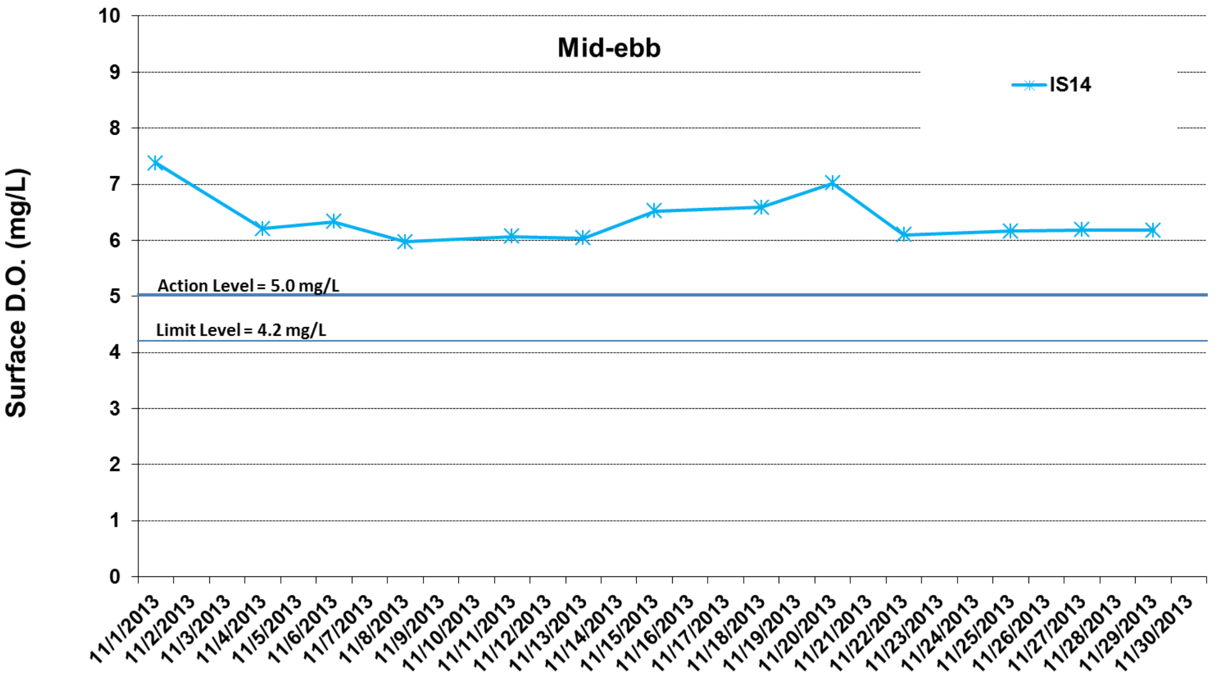


Figure I4 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at IS13.

ERM



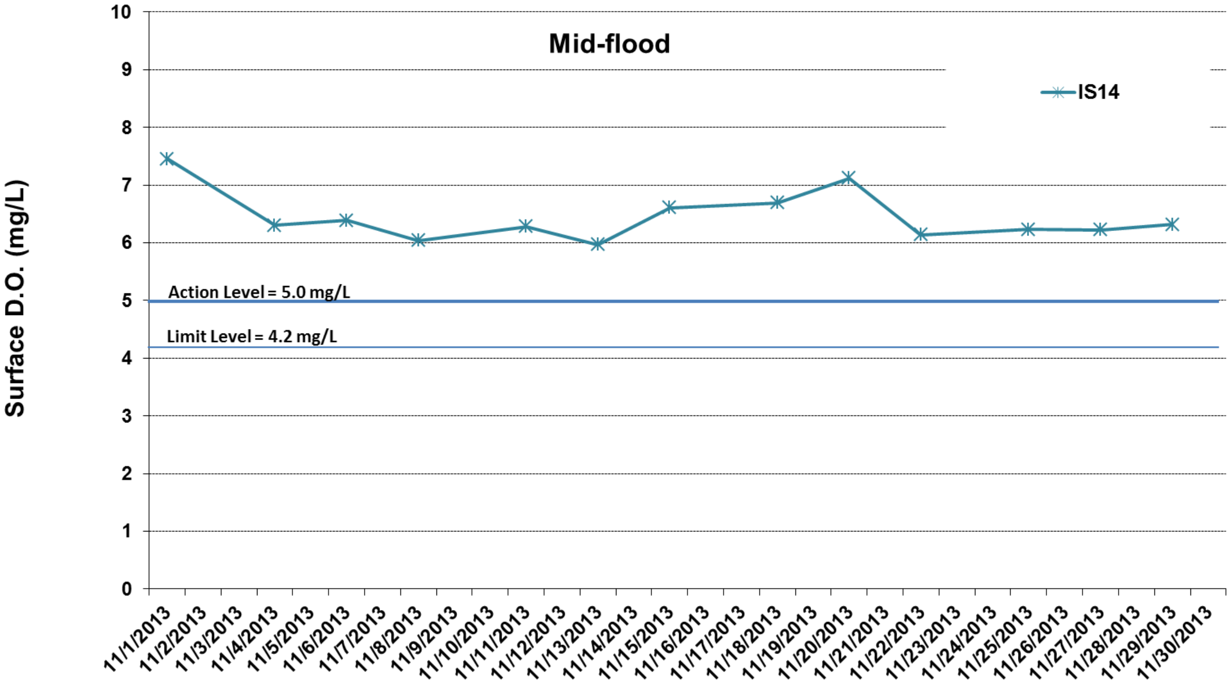
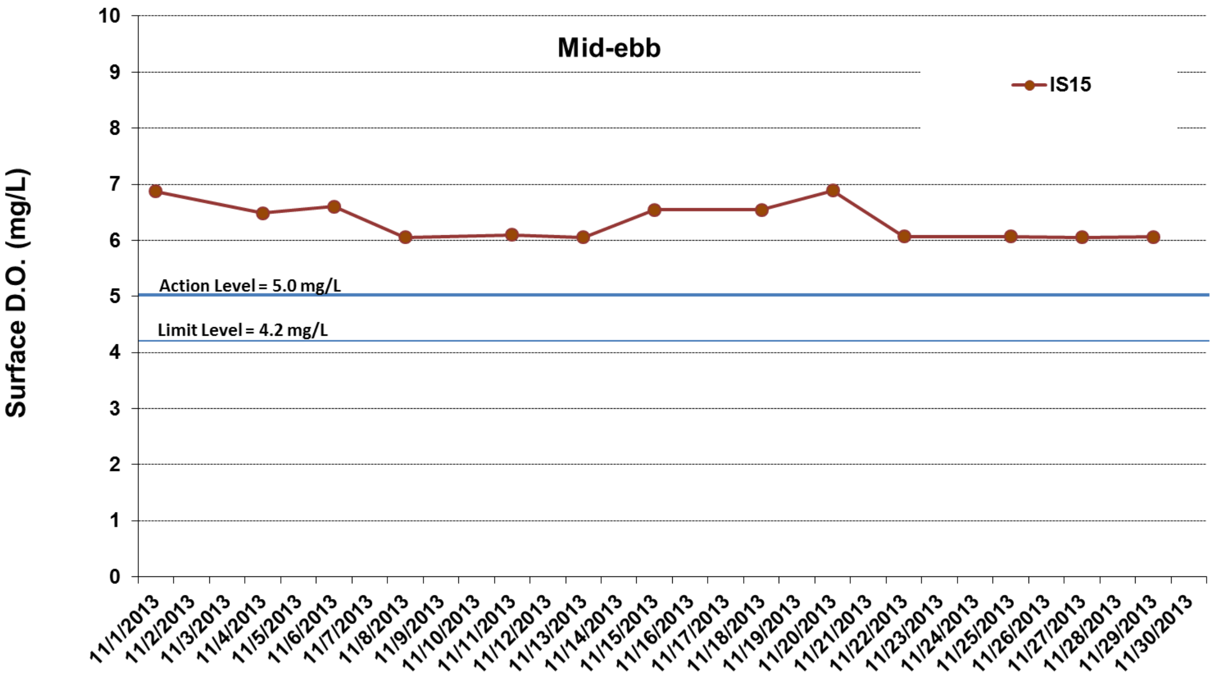


Figure I5 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at IS14.

ERM



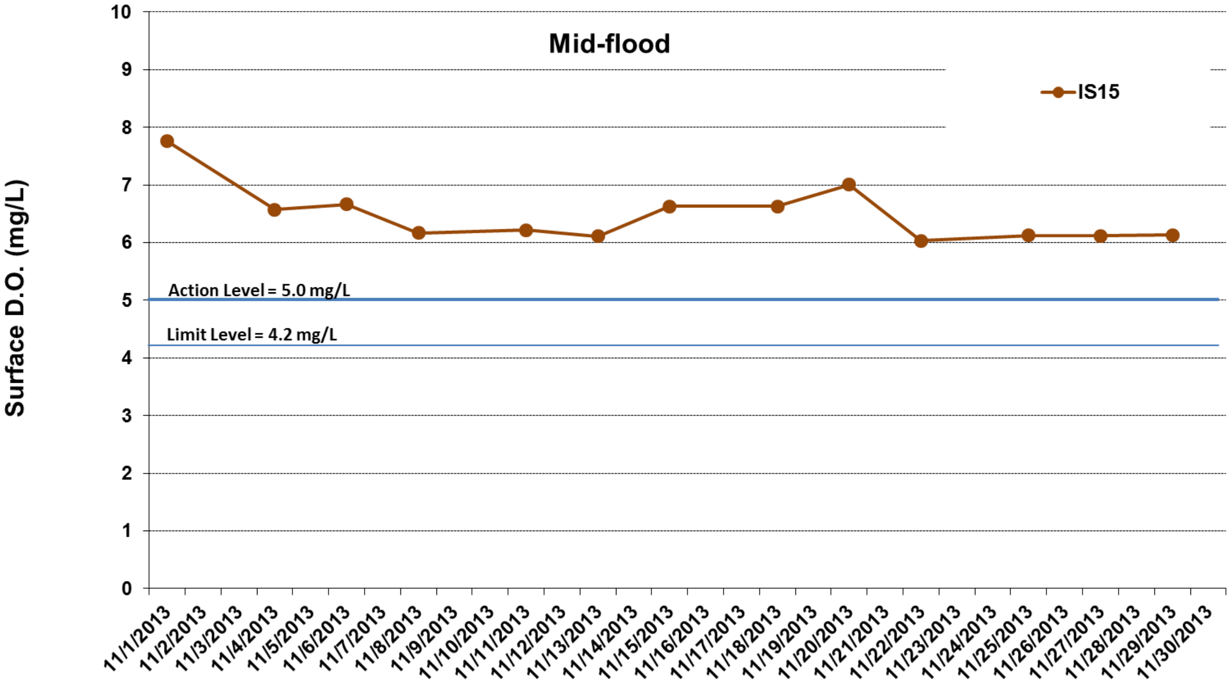
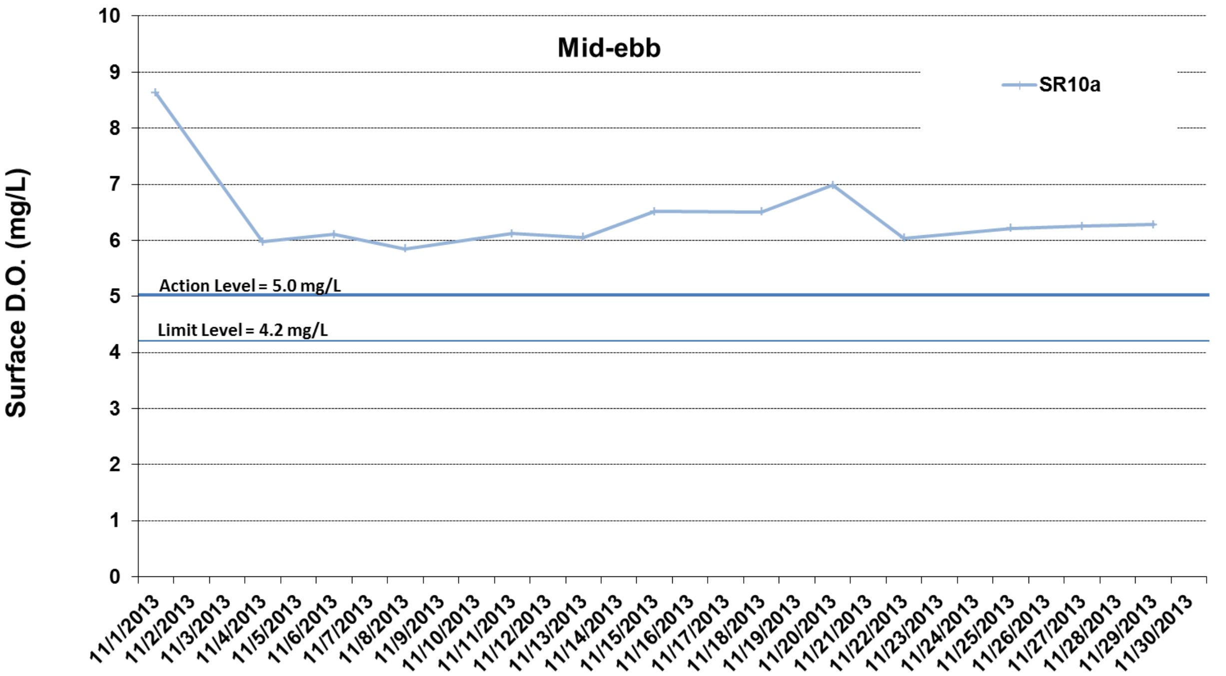


Figure I6 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at IS15.



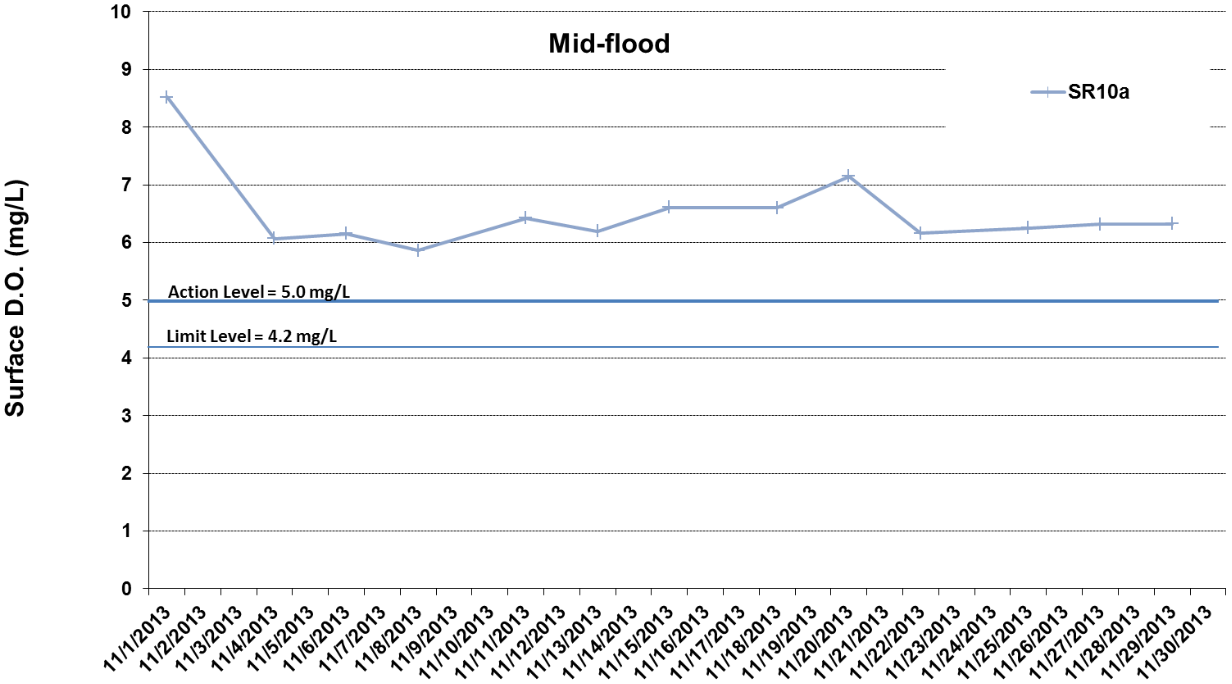


Figure I7 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at SR10a.

ERM

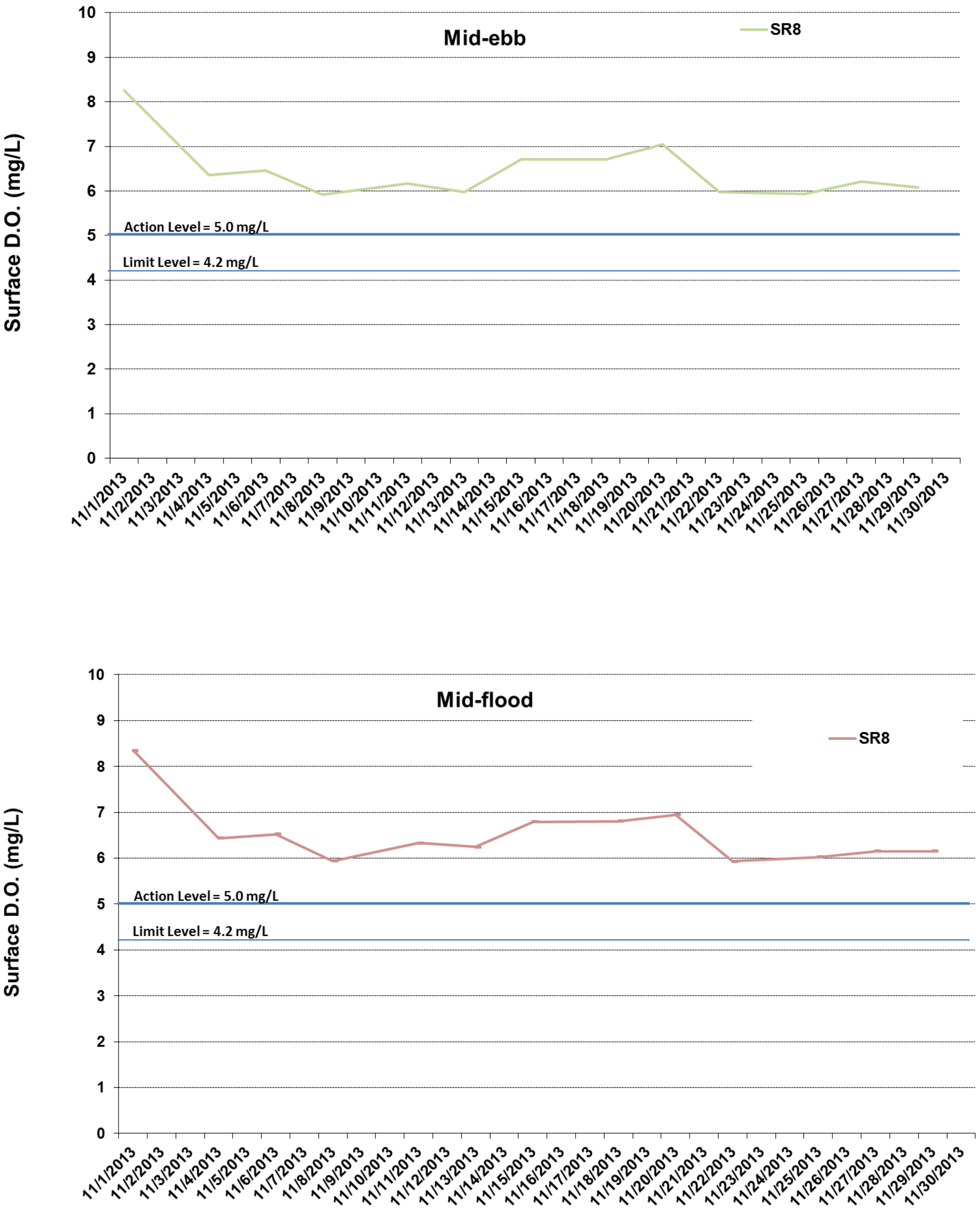
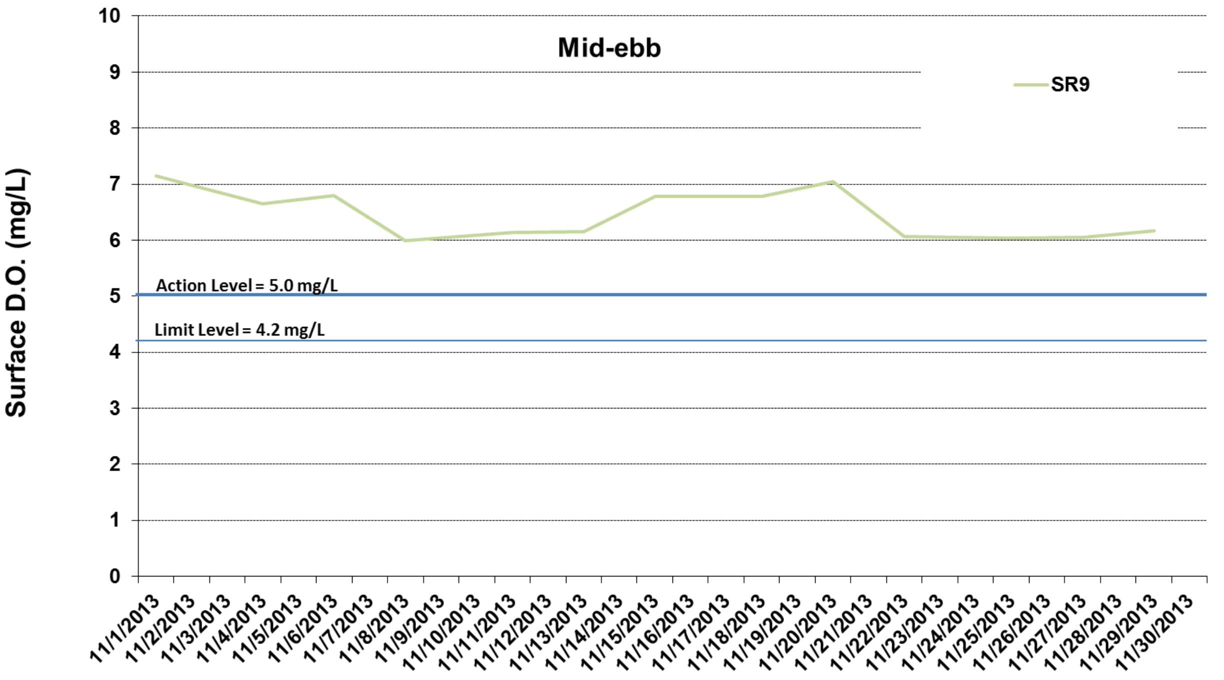


Figure I8 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at SR8.

ERM



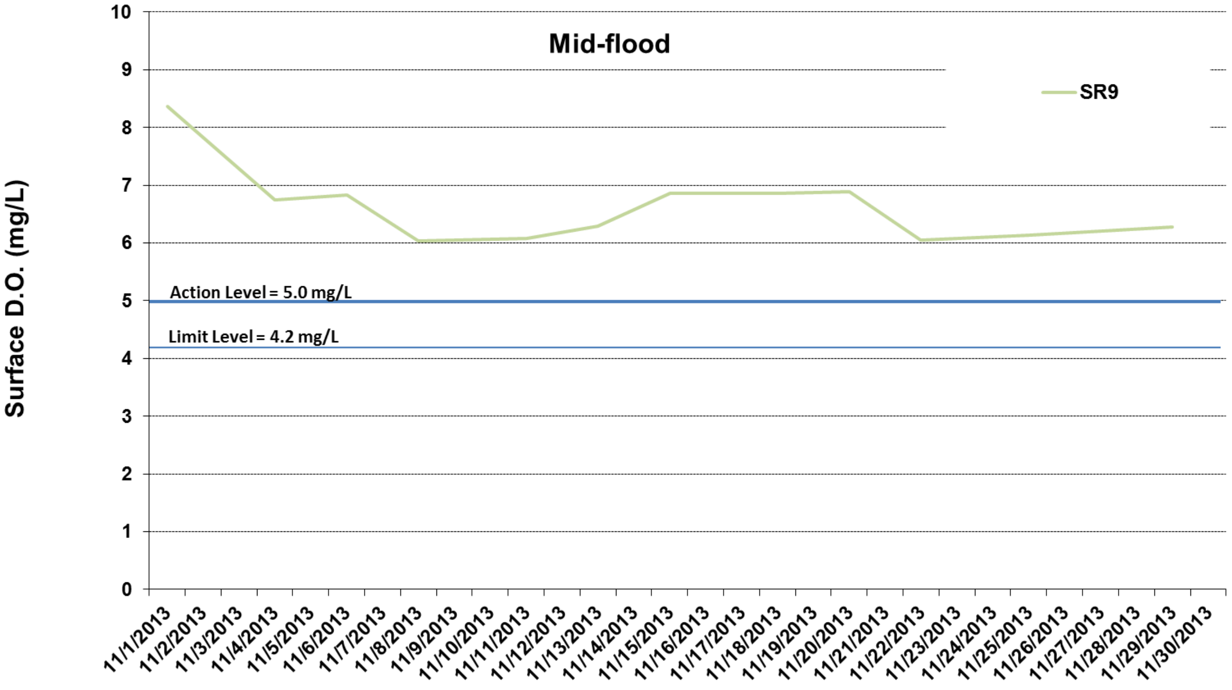
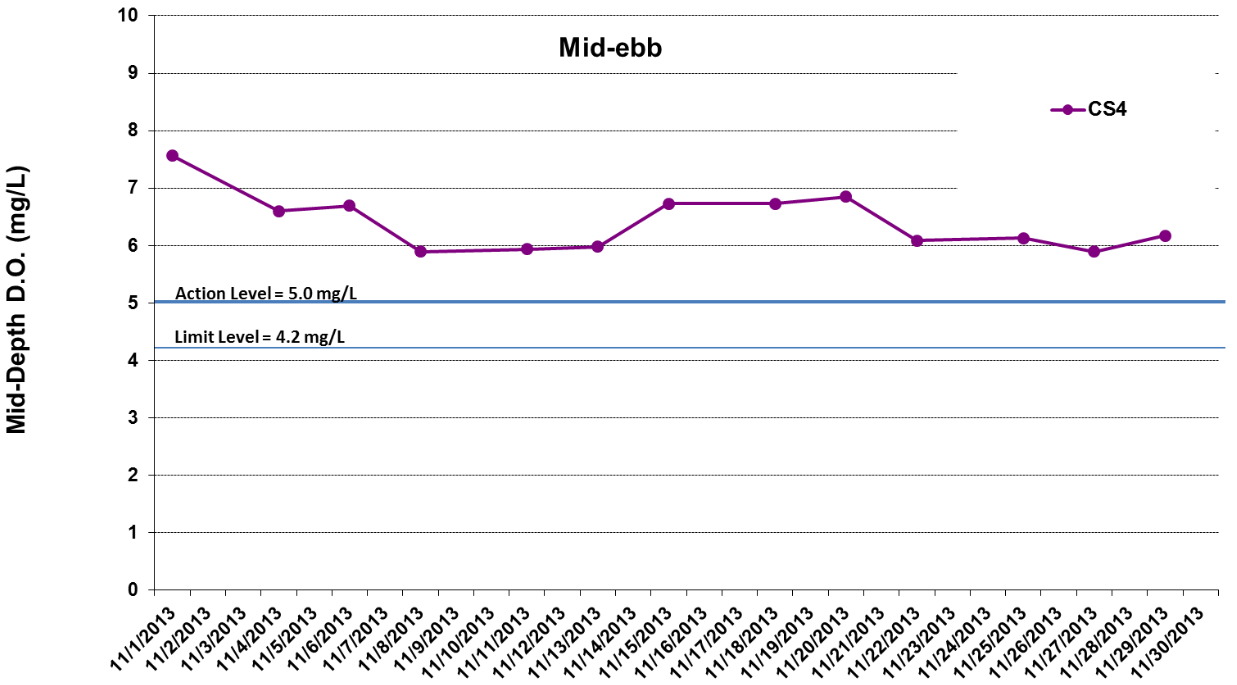
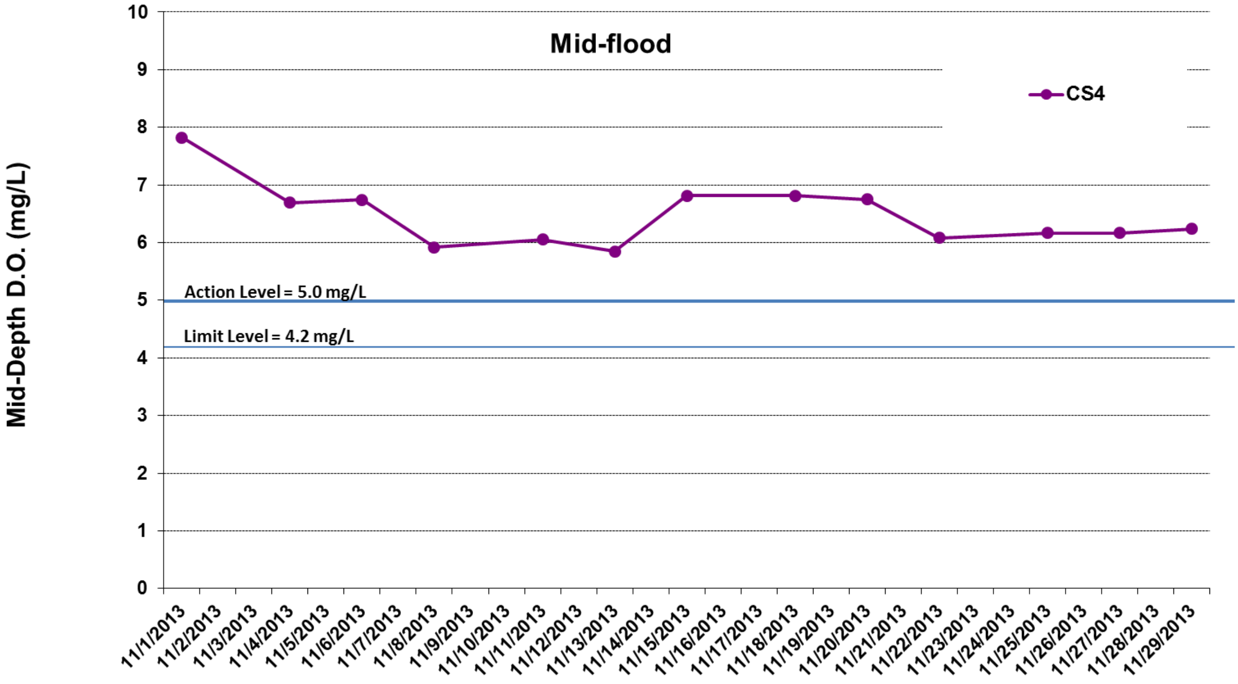


Figure I9 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters between 1 and 30 November 2013 at SR9.

ERM

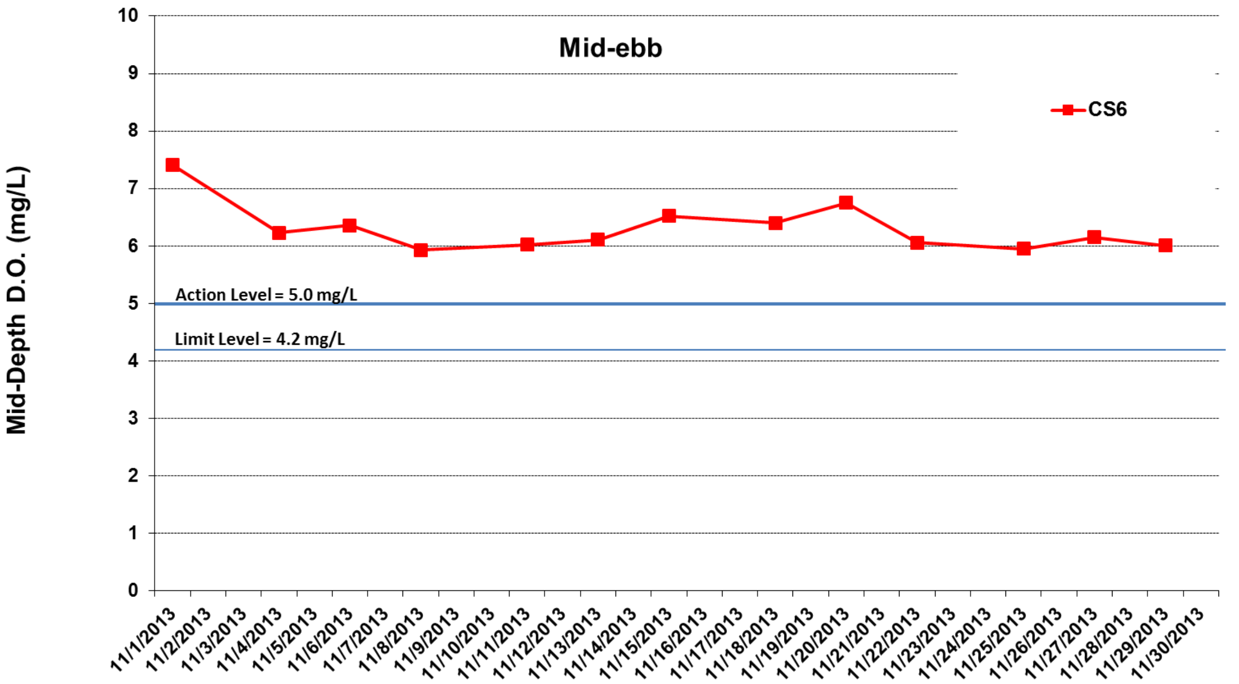


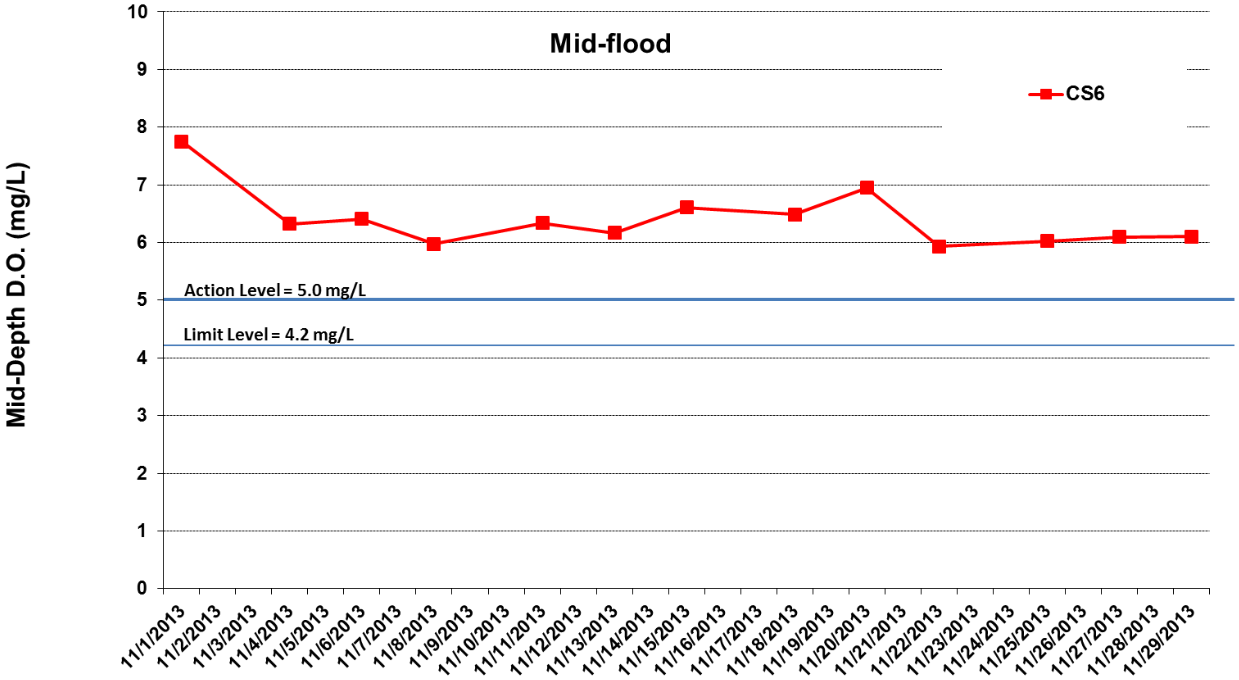


*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I10 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 and 30 November 2013 at the CS4.

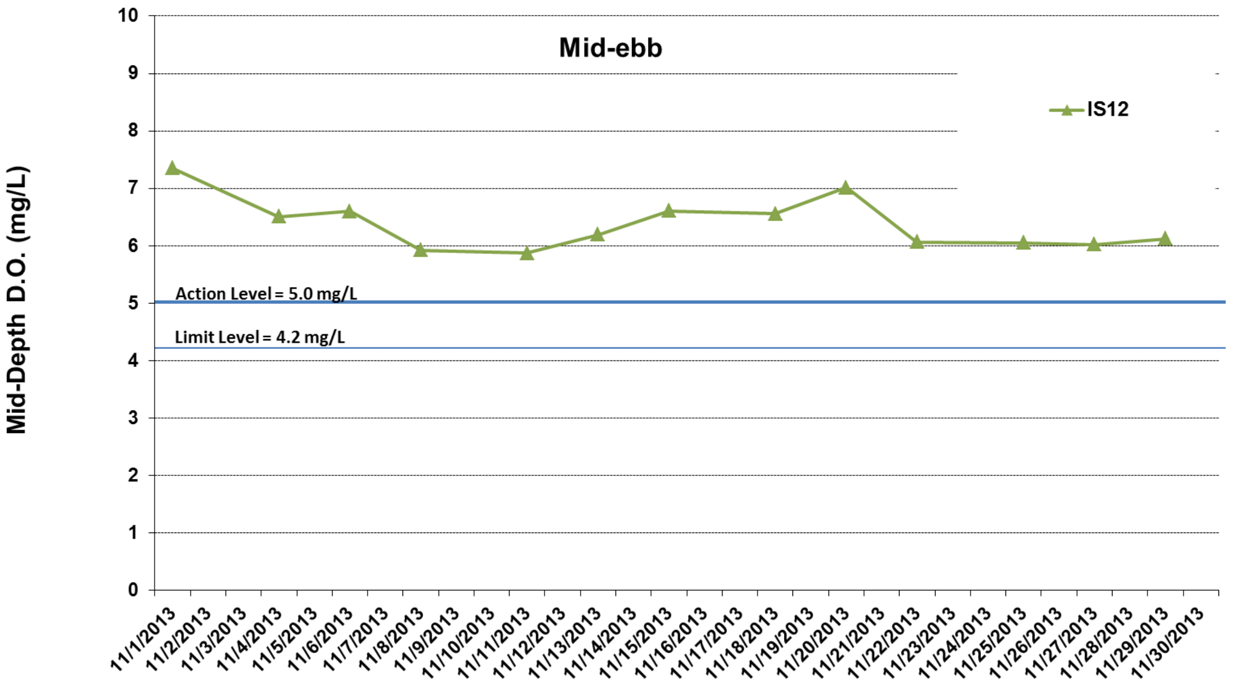
ERM

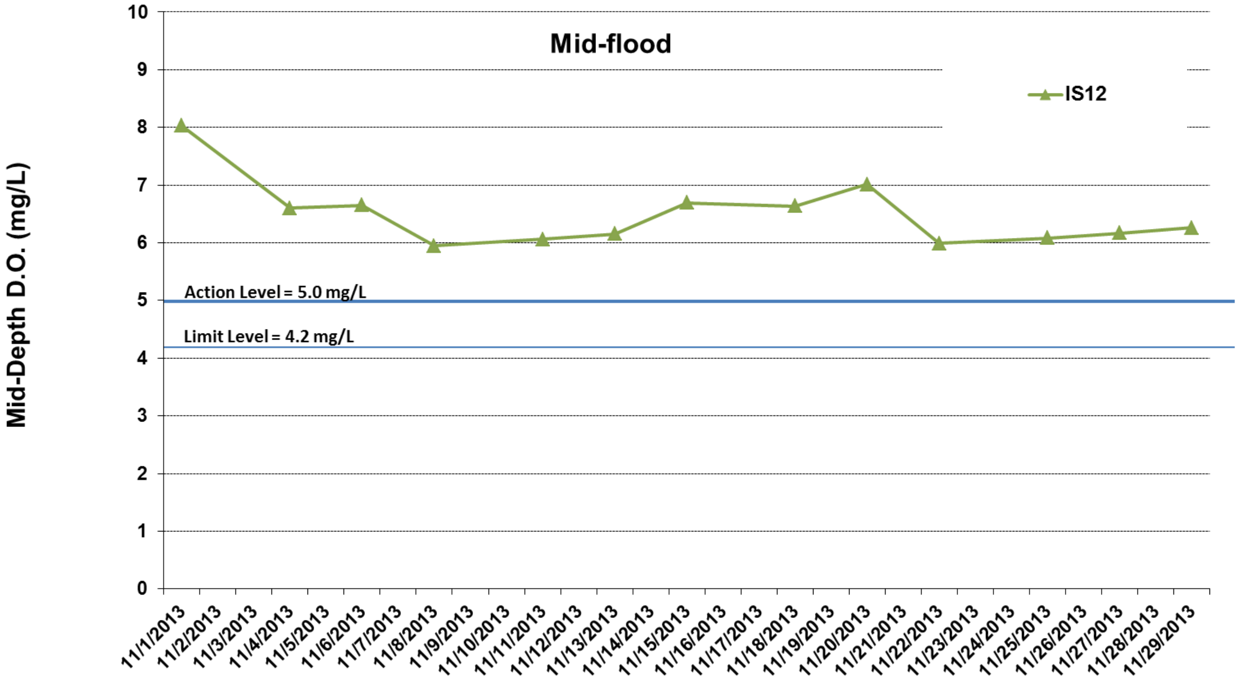




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I11 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 and 30 November 2013 CS6.

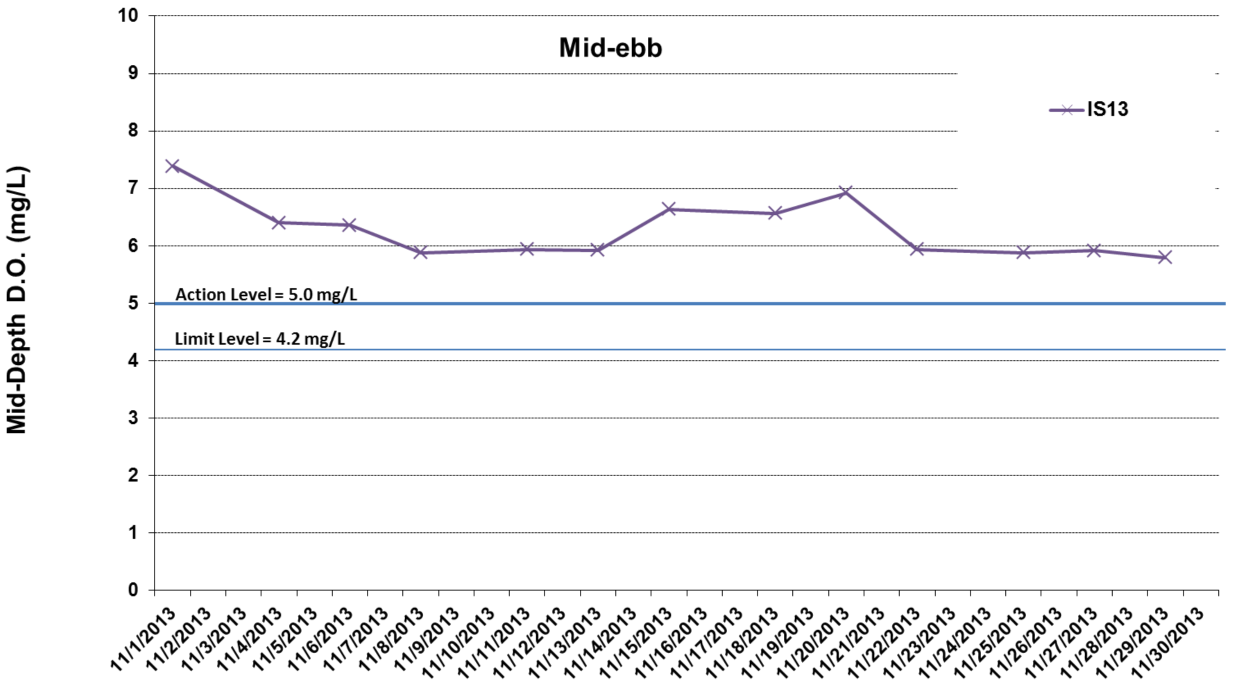


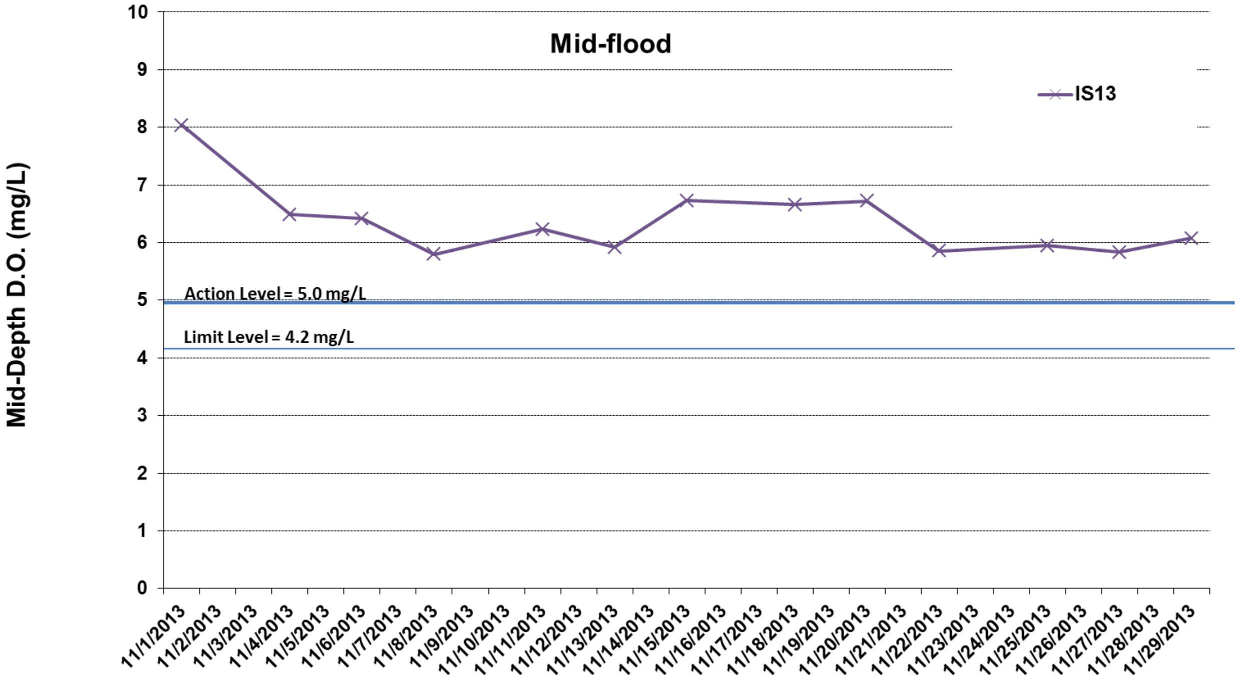


*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I12 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 and 30 November 2013 IS12.

ERM

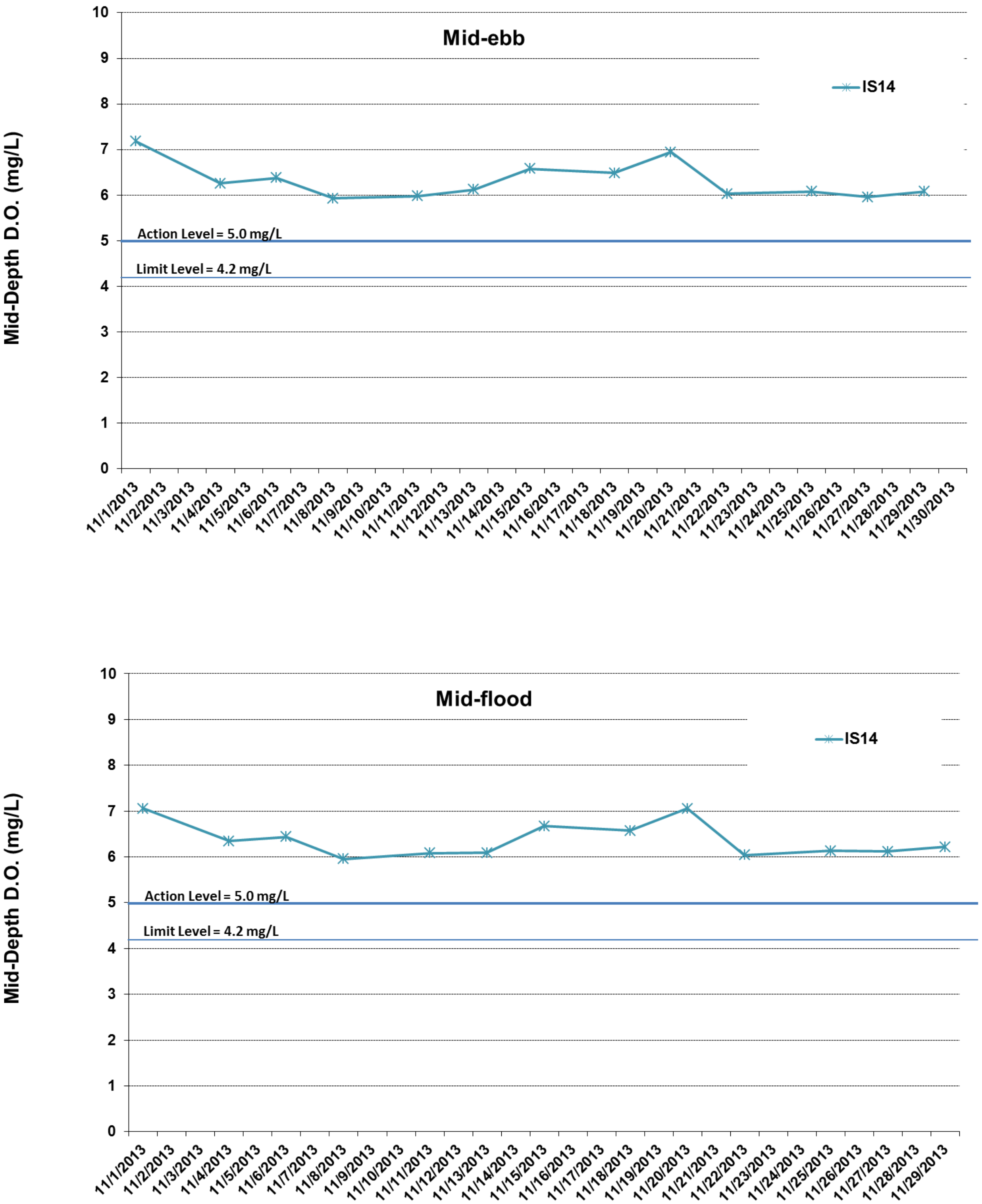




*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

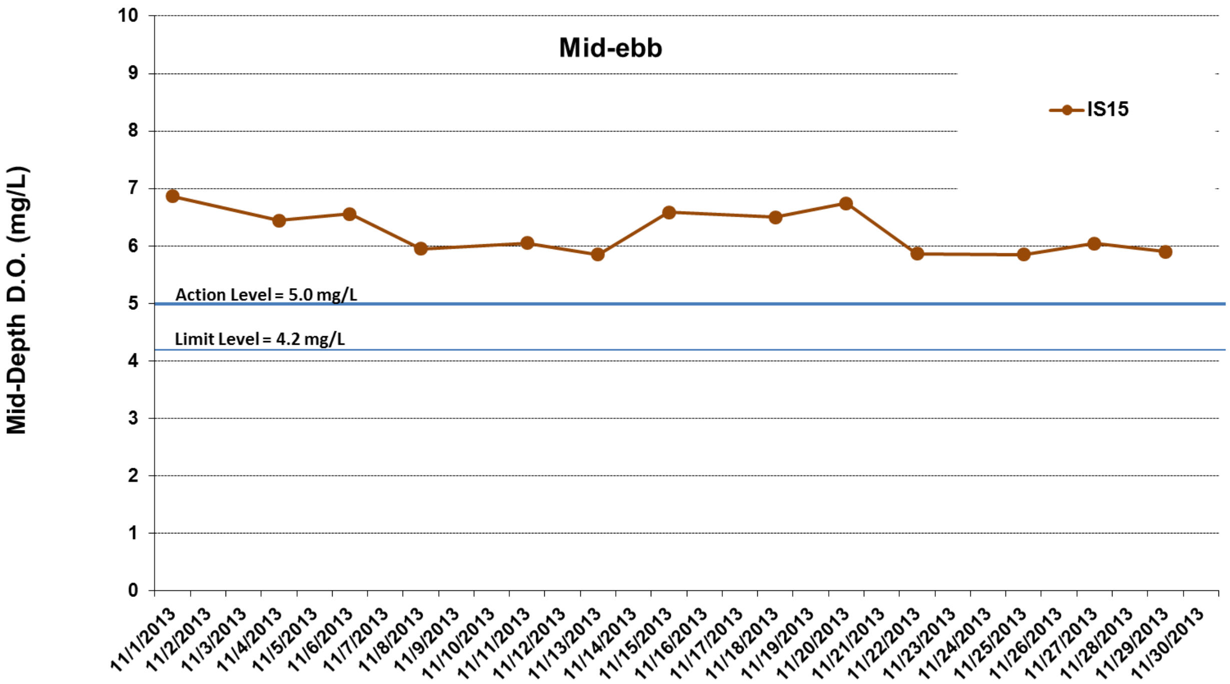
Figure I13 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 and 30 November 2013 IS13.

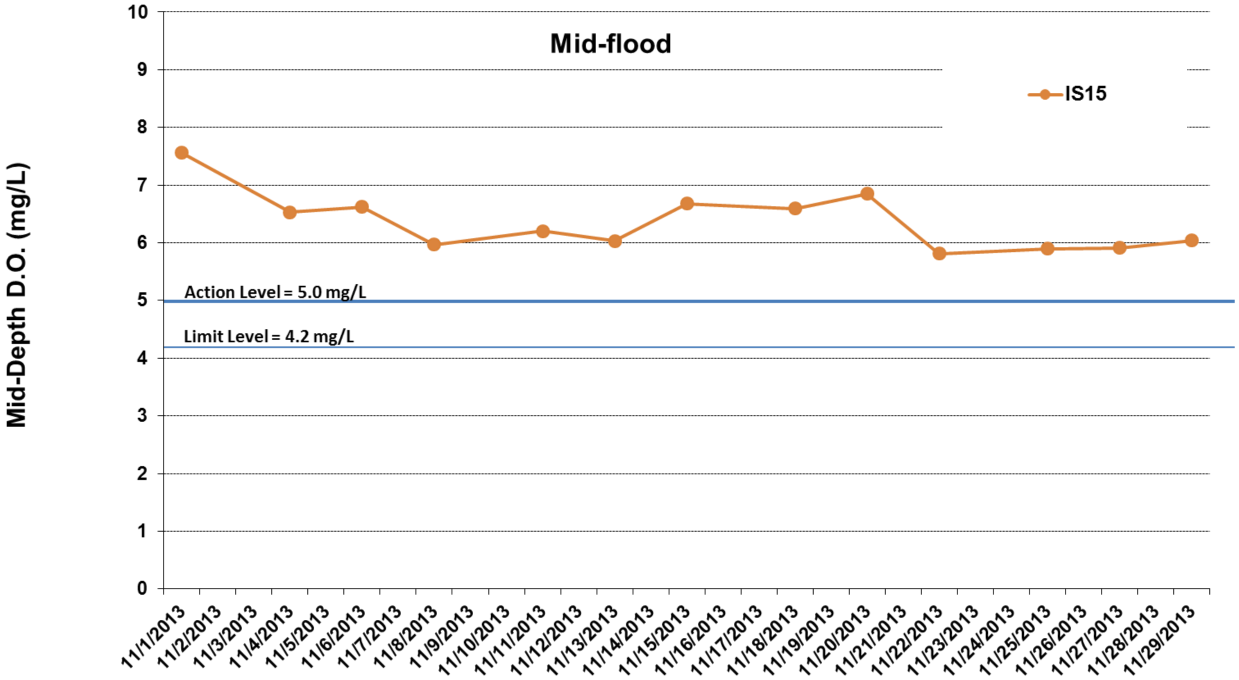
ERM



*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 and 30 November 2013 at IS14.

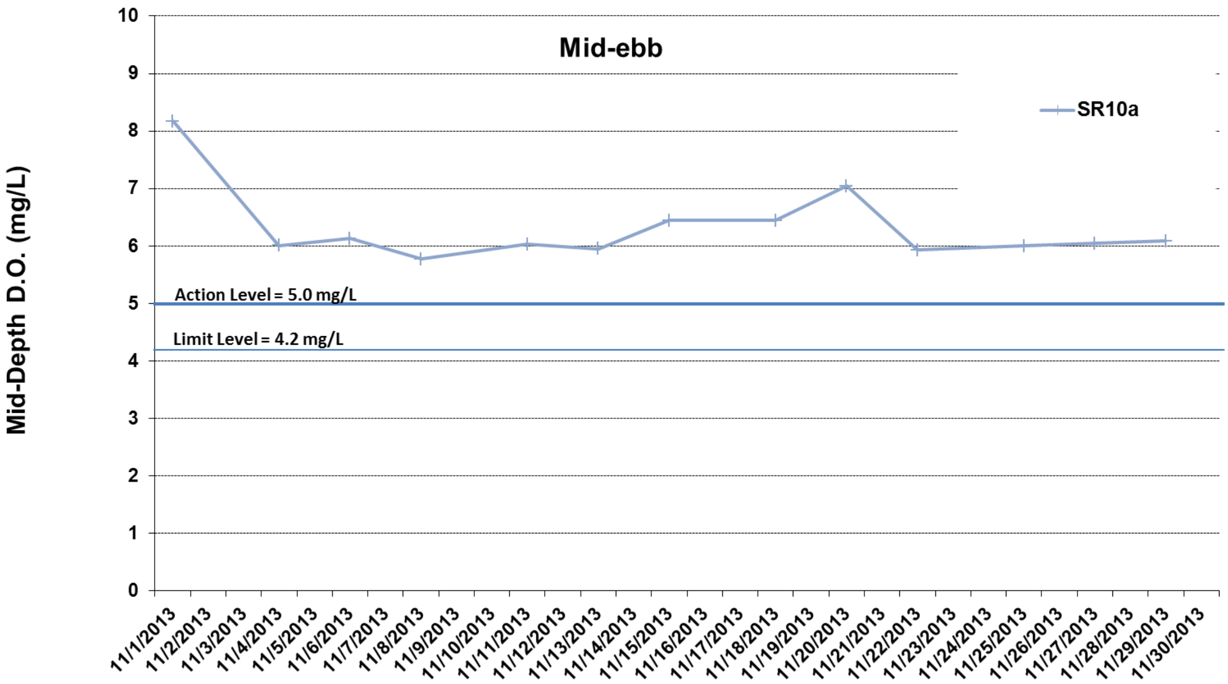


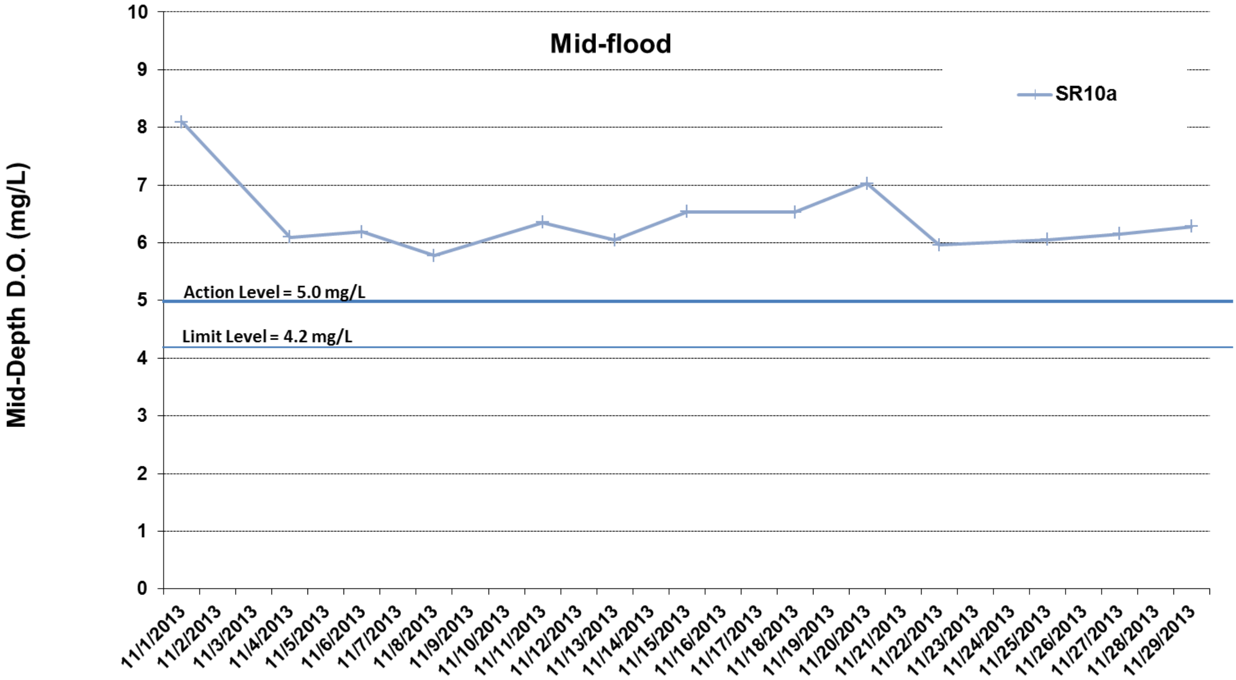


*No data for Stations SR8 and SR9 due to shallow water depth (< 6m).

Figure I15 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters between 1 and 30 November 2013 at IS15.

ERM





*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 and 30 November 2013 at SR10a.

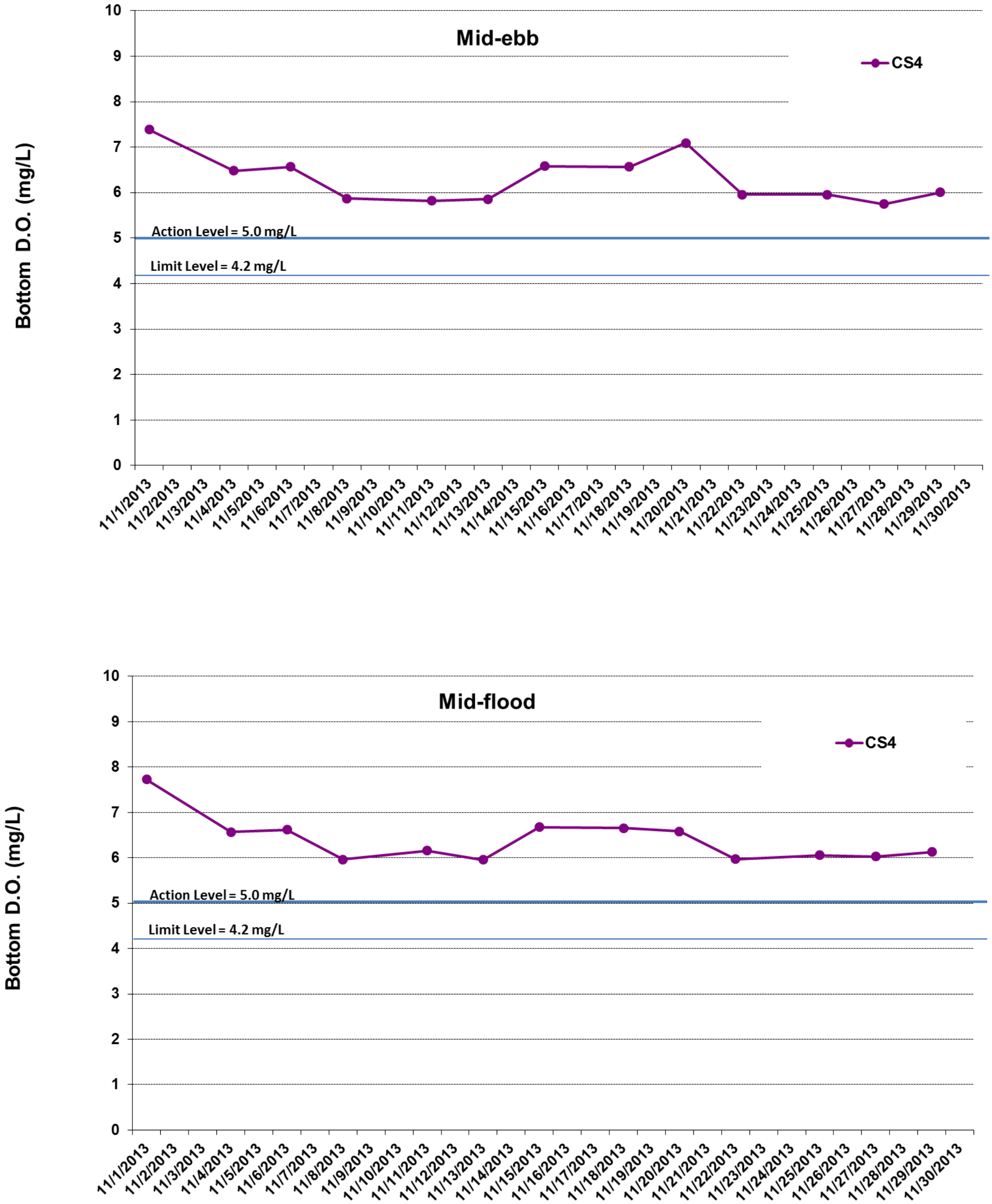
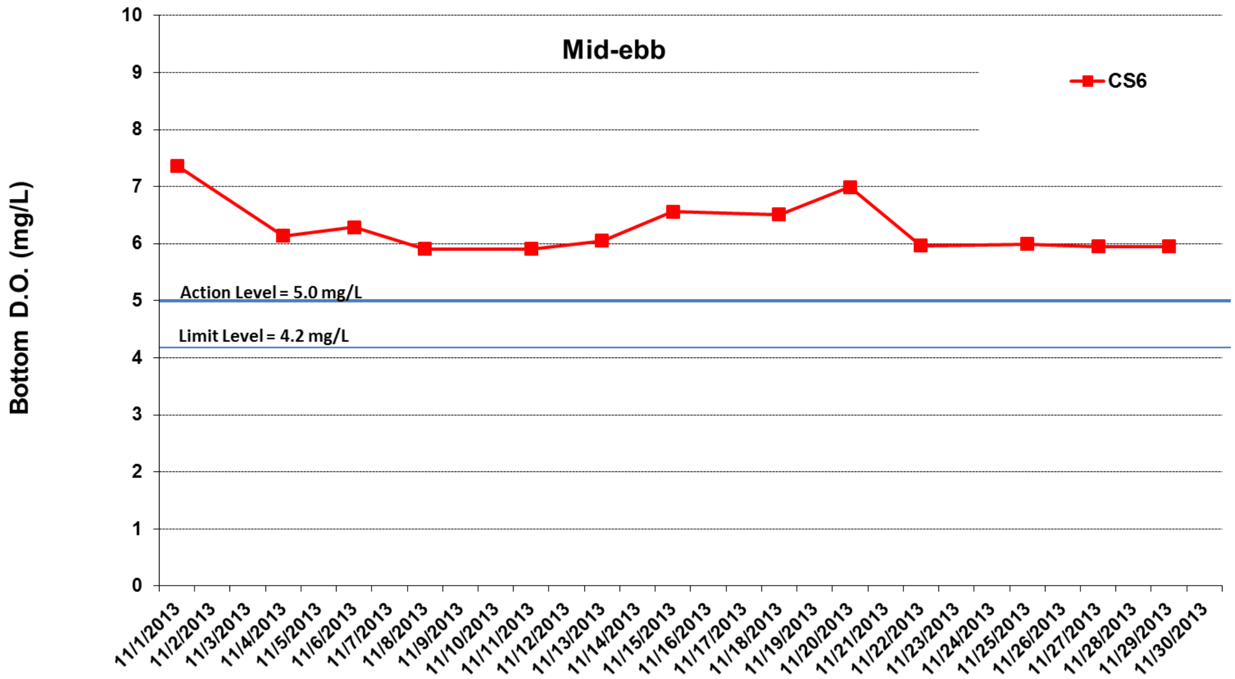


Figure I17 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at CS4.

ERM



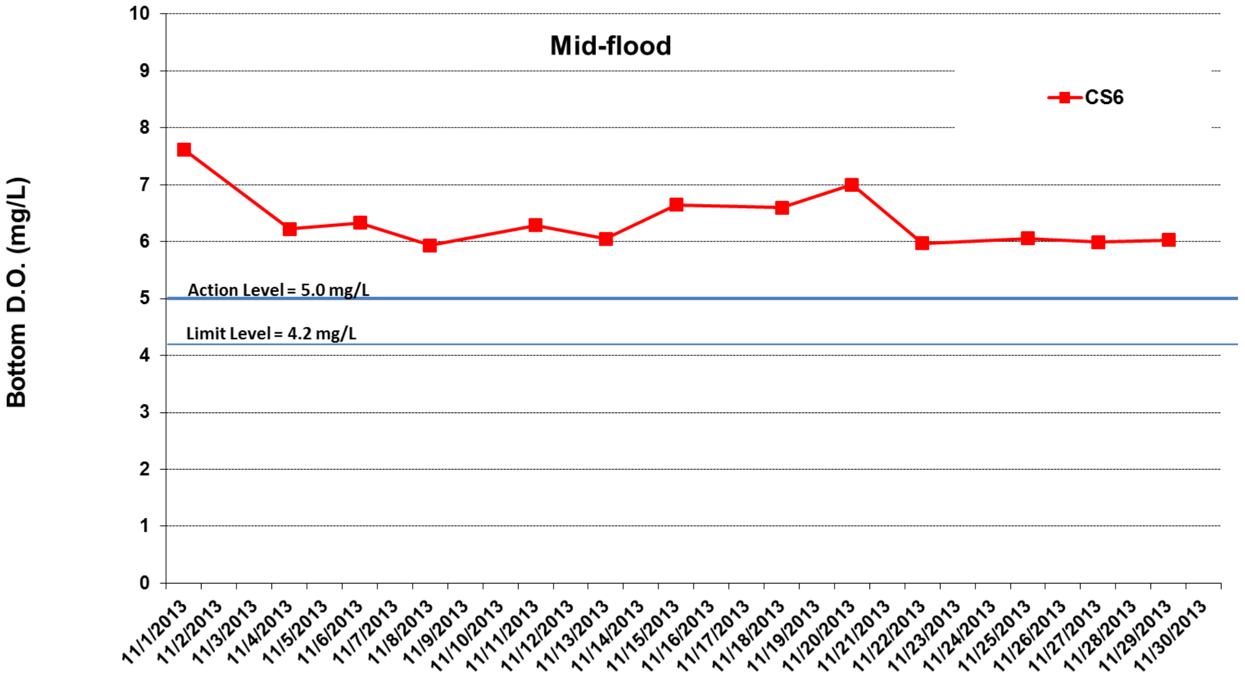
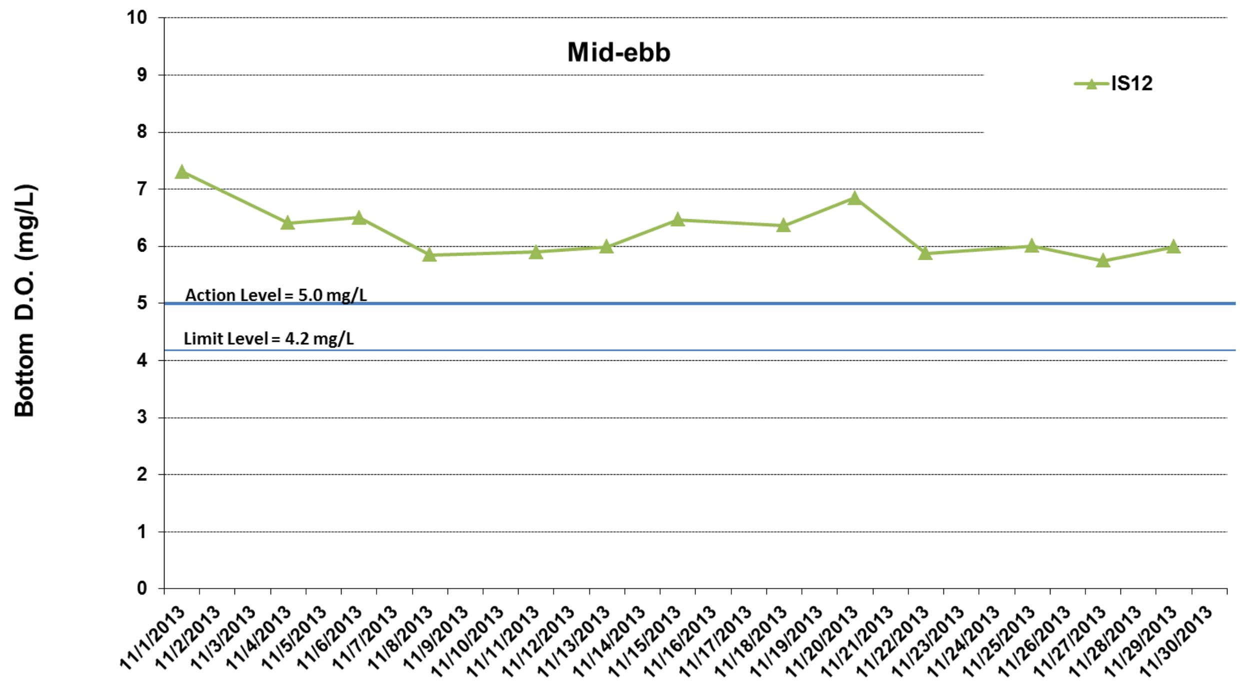


Figure I18 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at CS6.



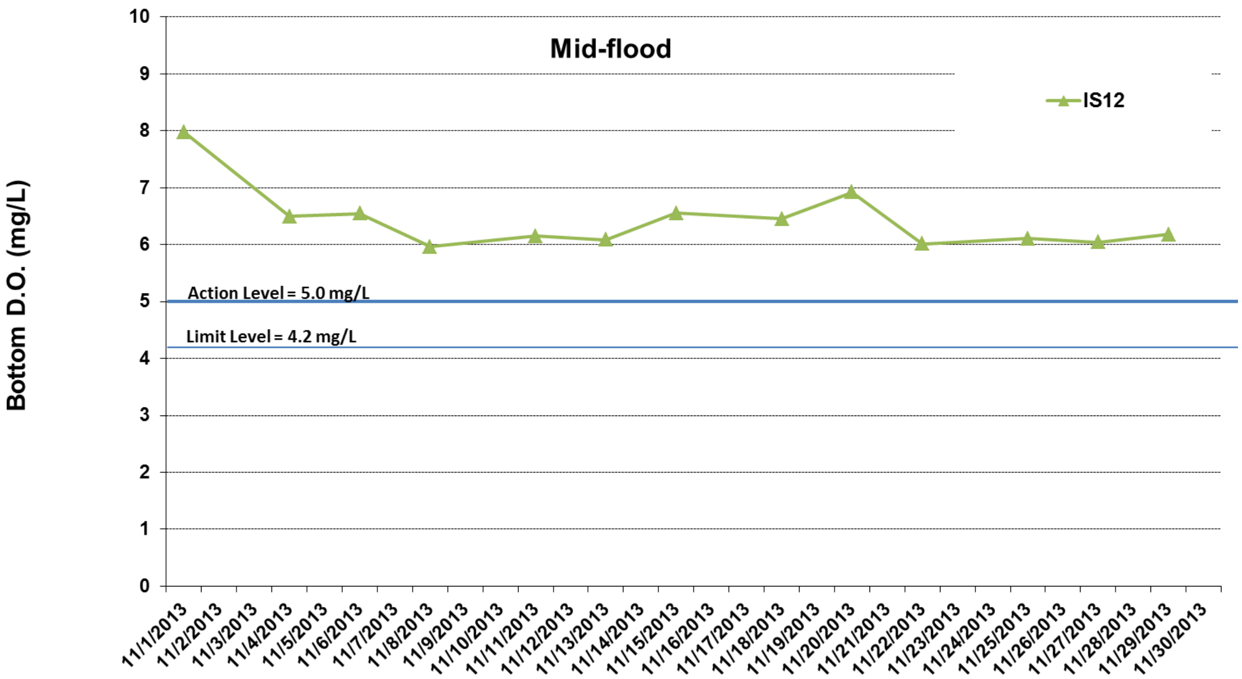
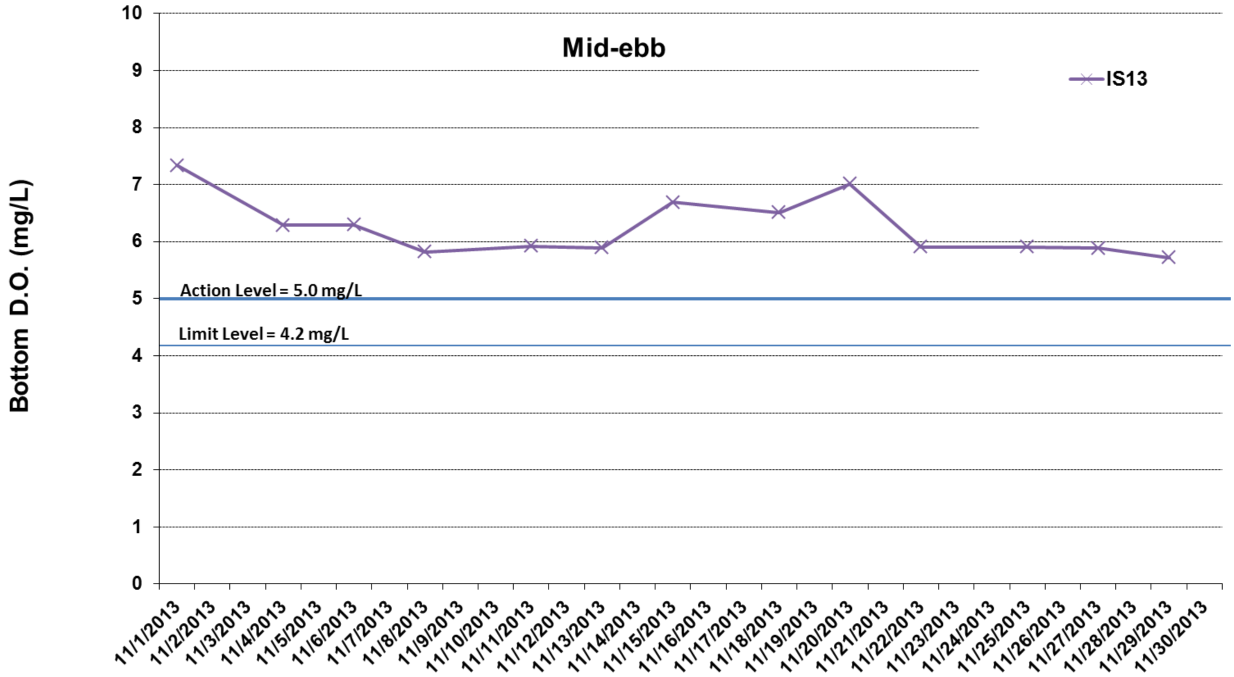


Figure I19 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at IS12.

ERM



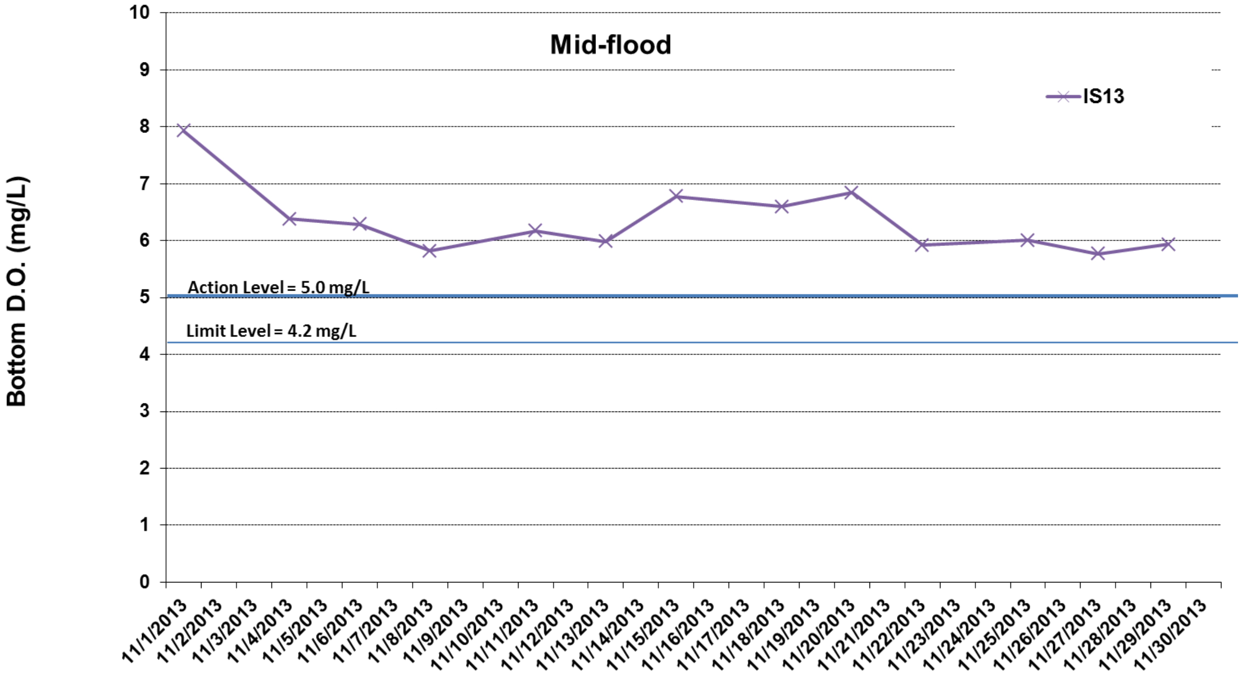
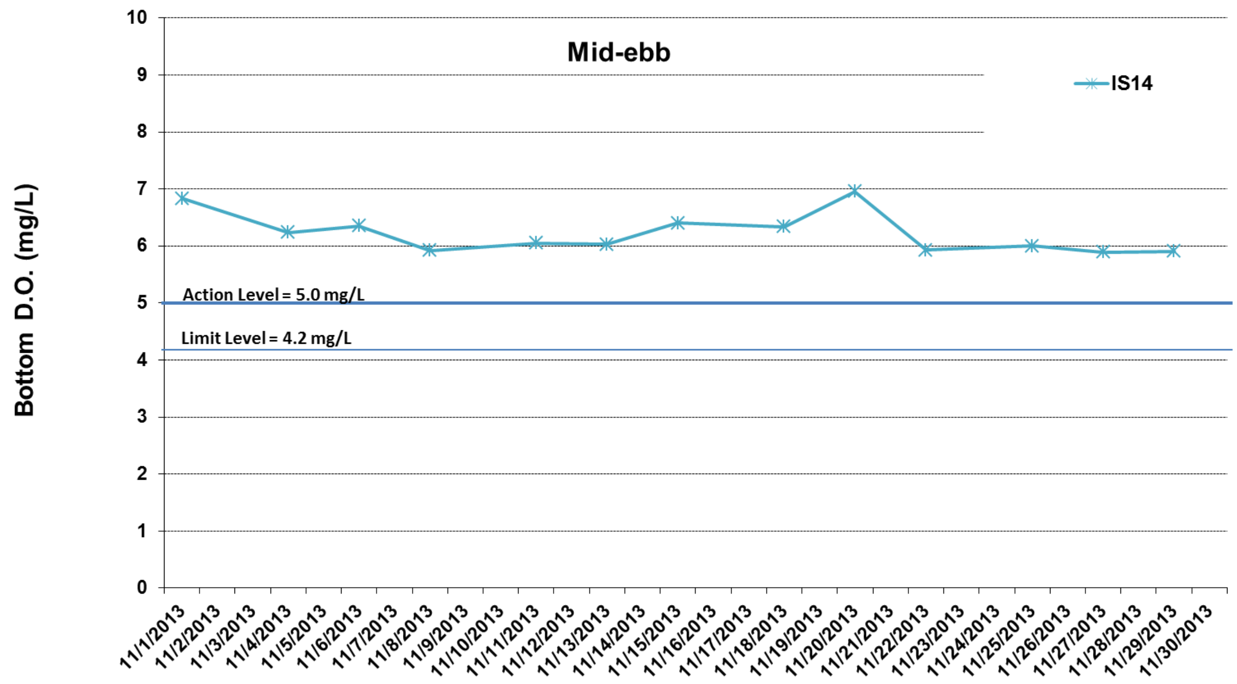


Figure I20 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at IS13.



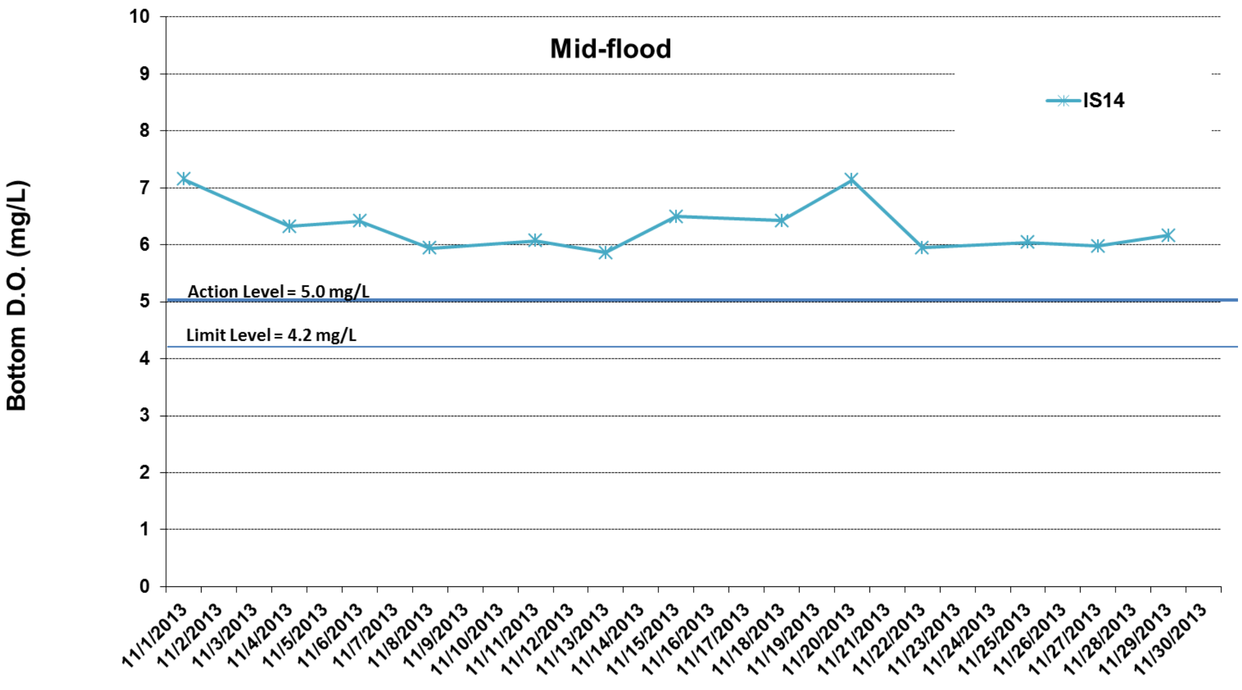


Figure I21 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at IS14.

ERM

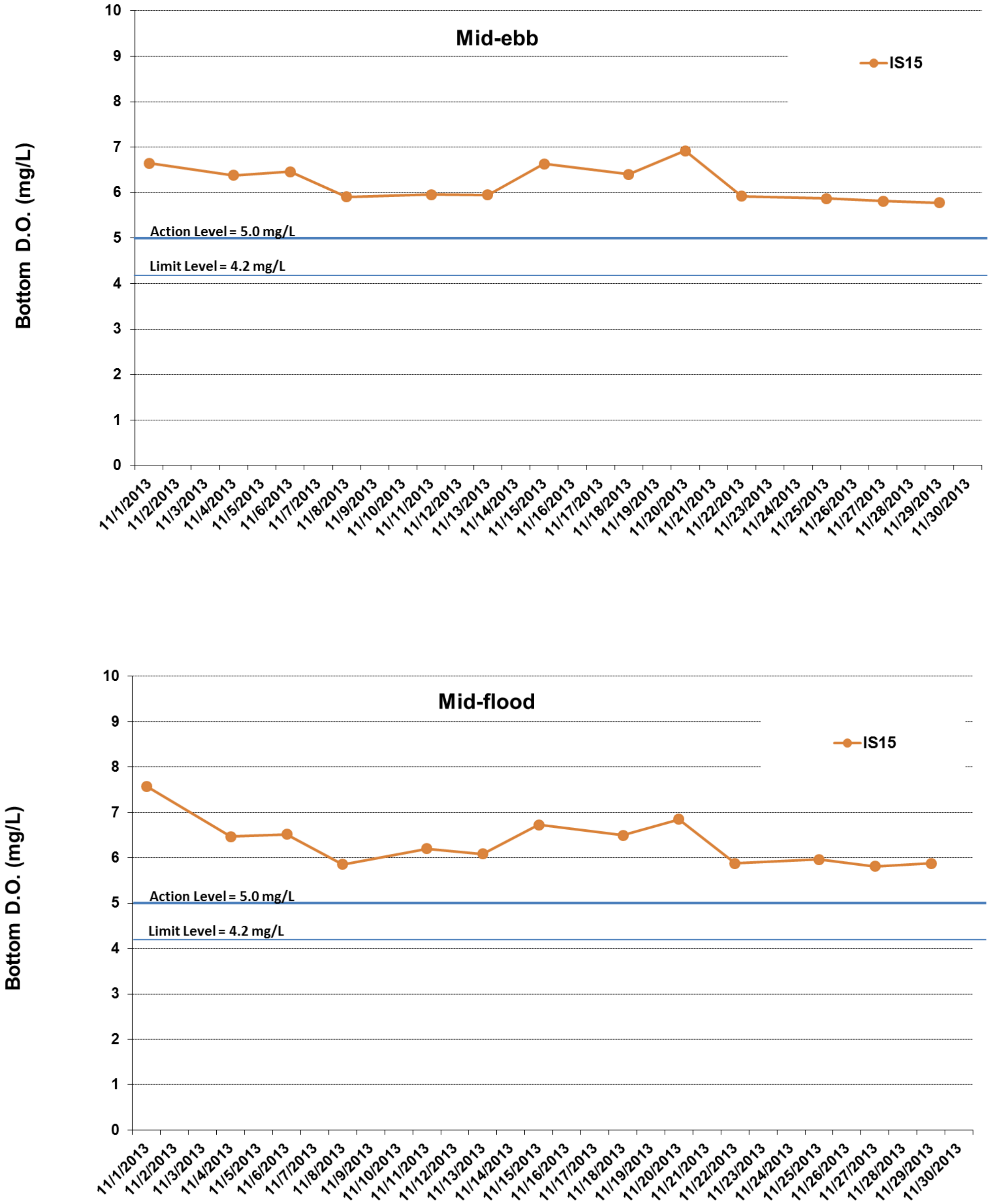
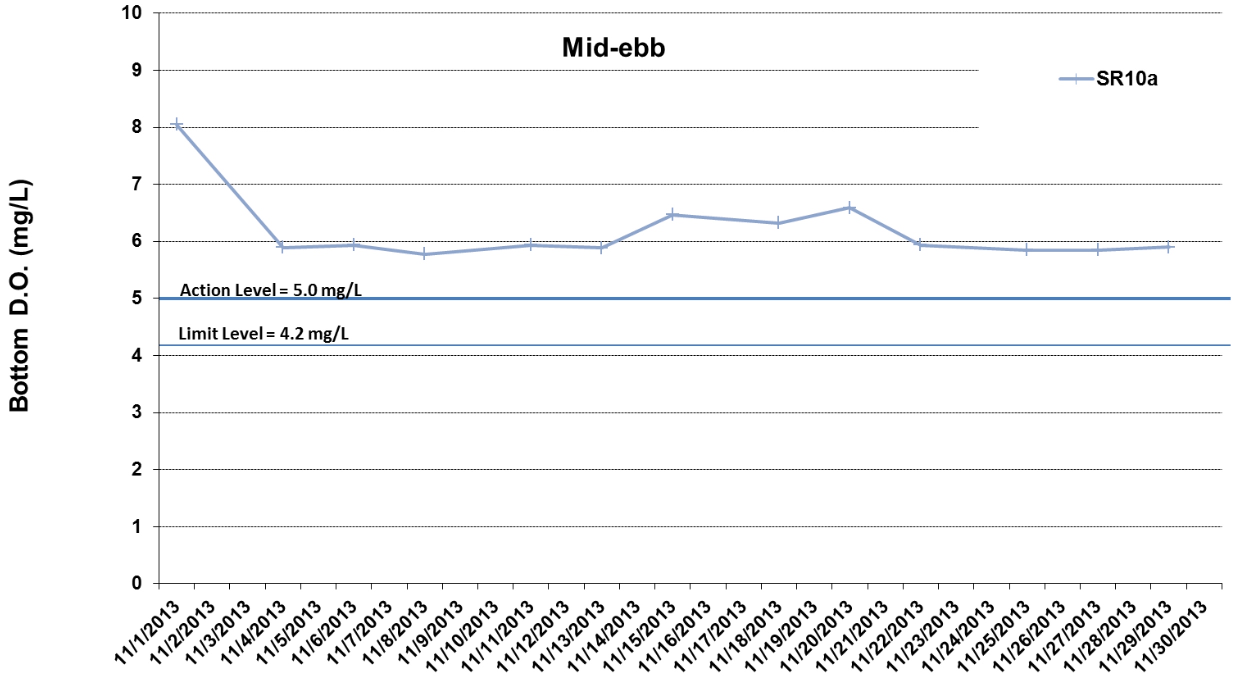


Figure I22 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at IS15.



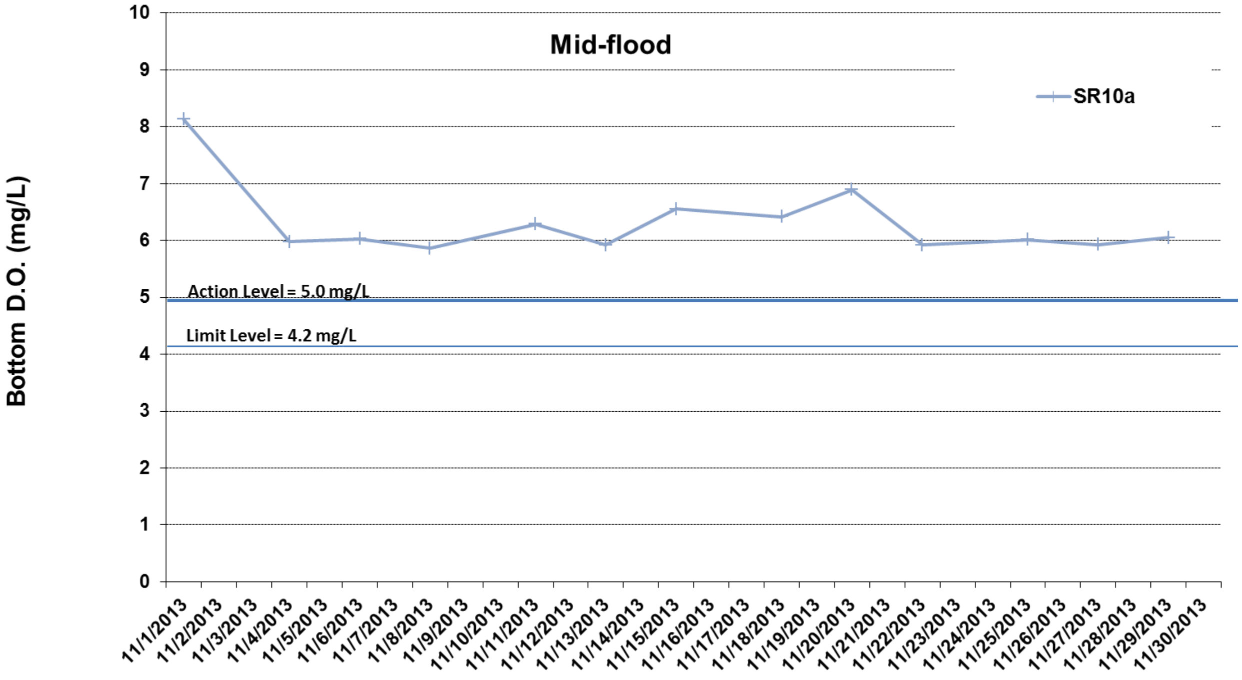
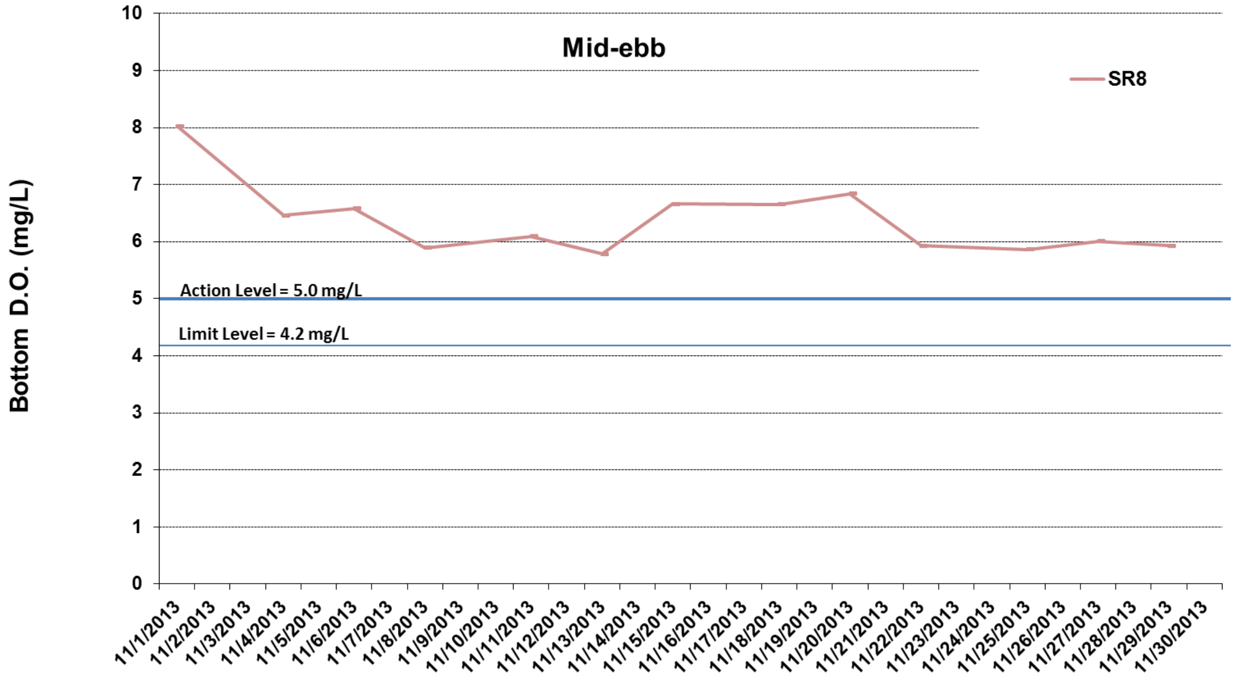


Figure I23 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at SR10a.

ERM



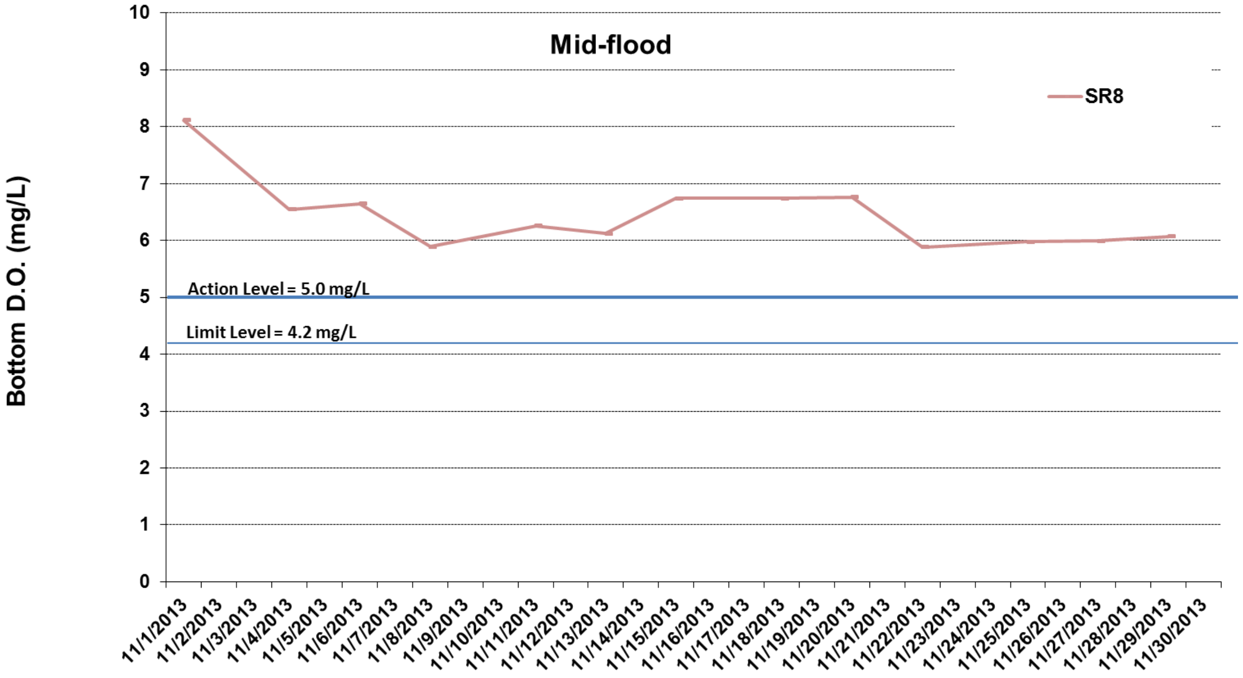


Figure I24 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at SR8.

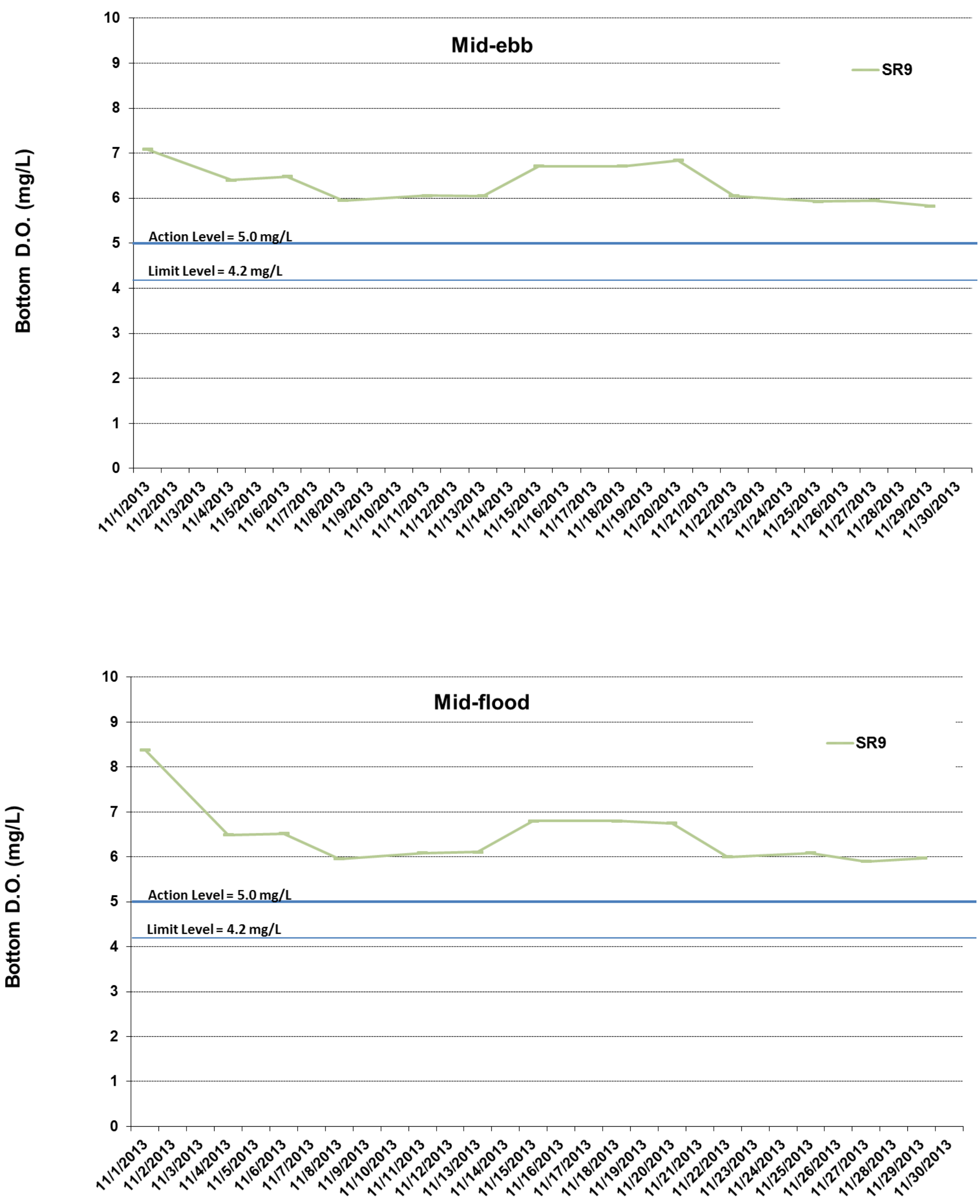
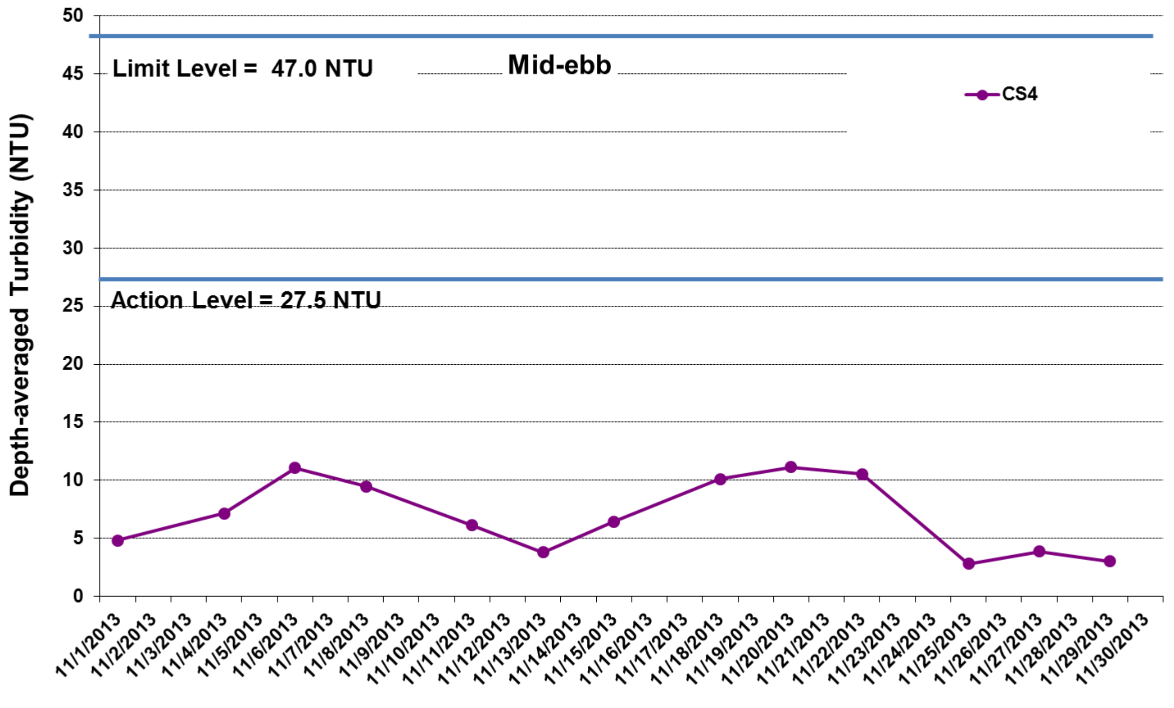


Figure I25 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom water between 1 and 30 November 2013 at SR9.



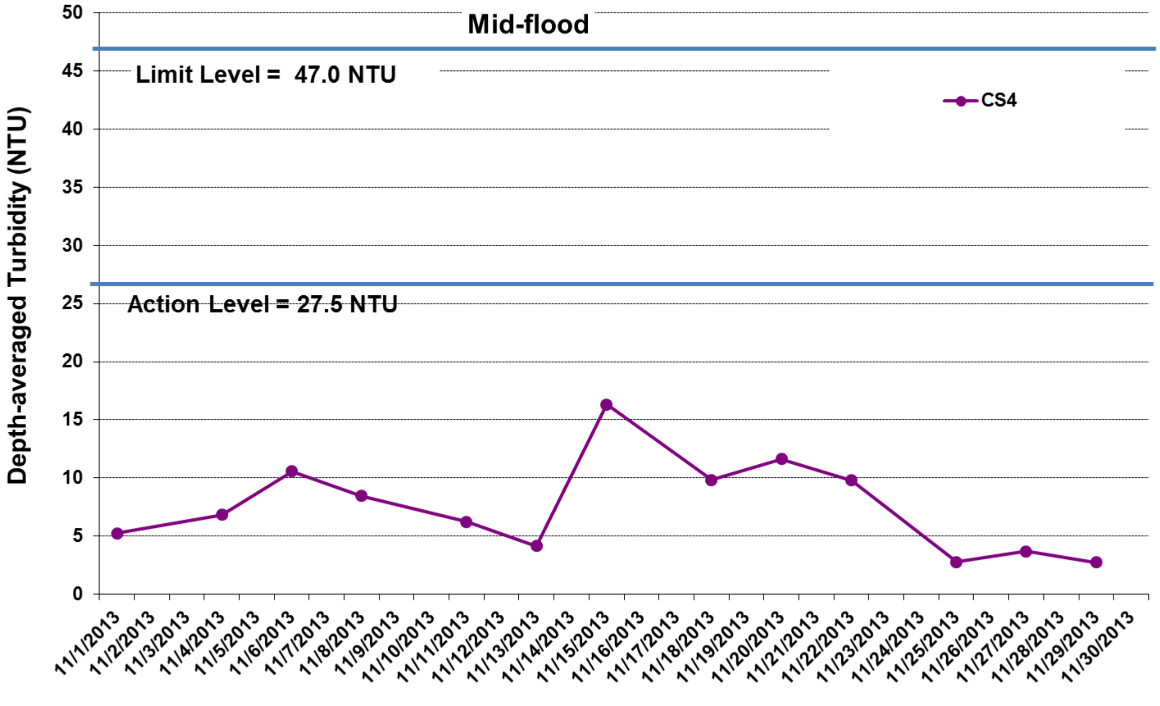
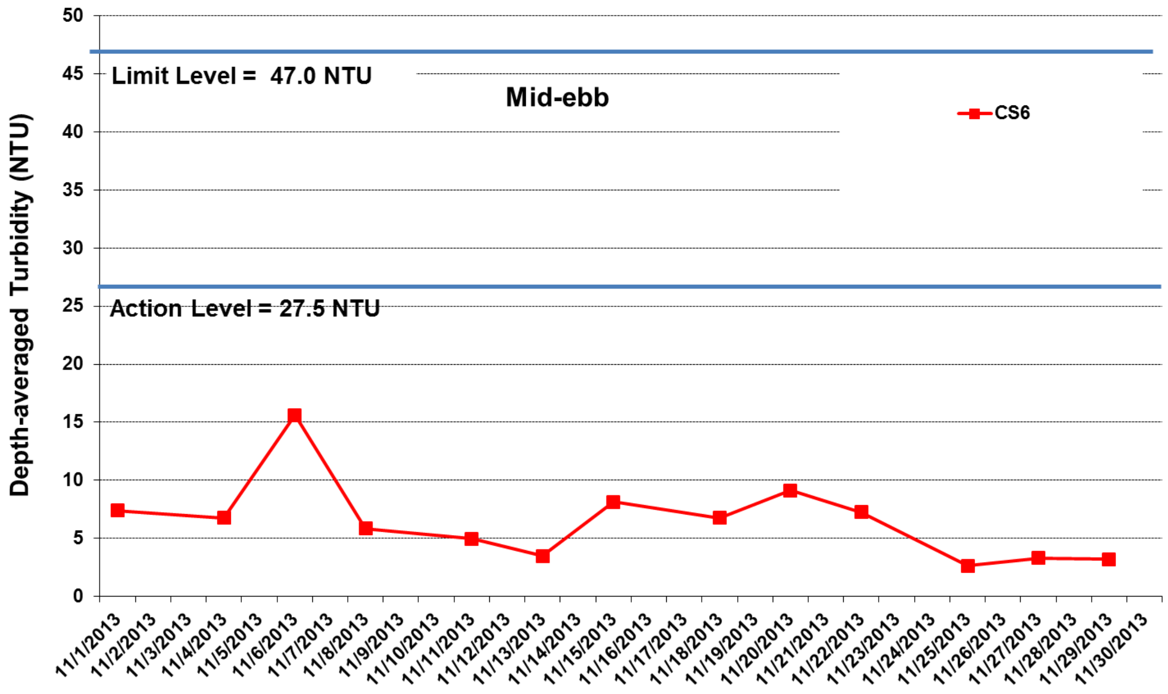


Figure I26 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at CS4.

ERM



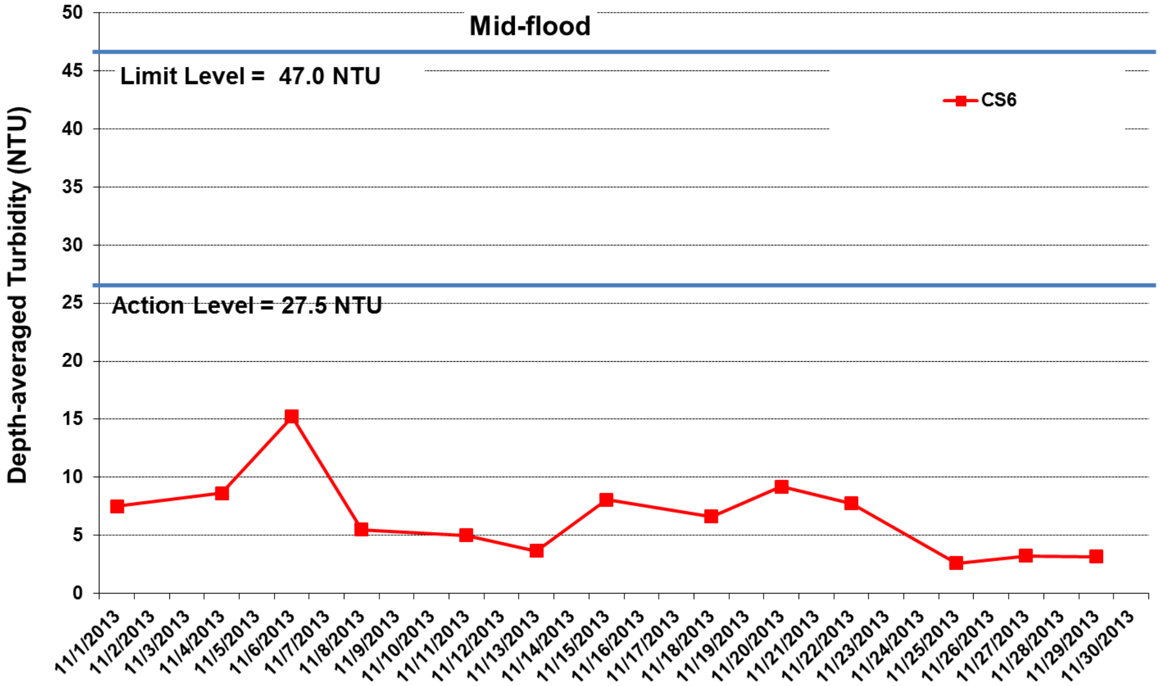


Figure I27 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at CS6.

ERM

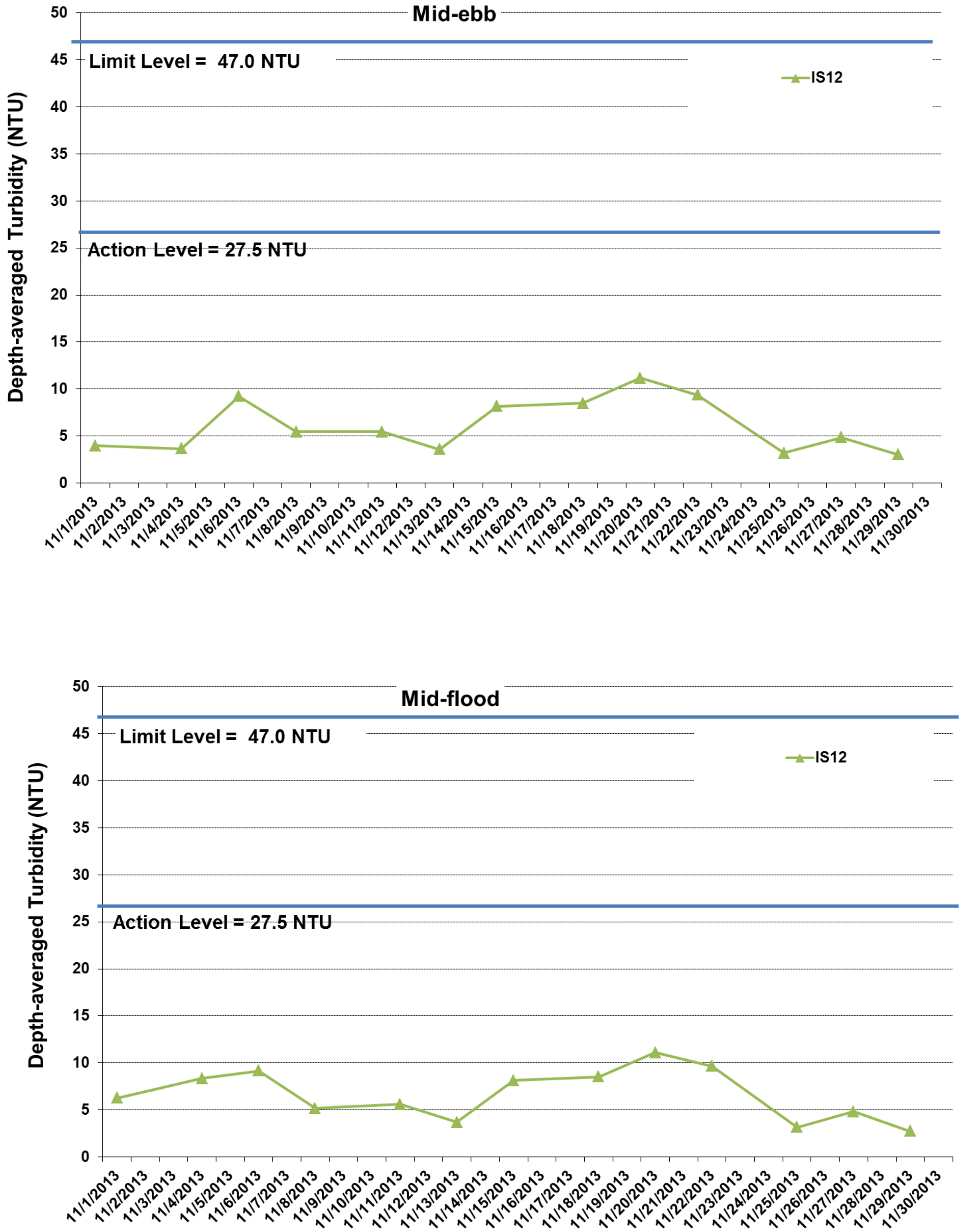
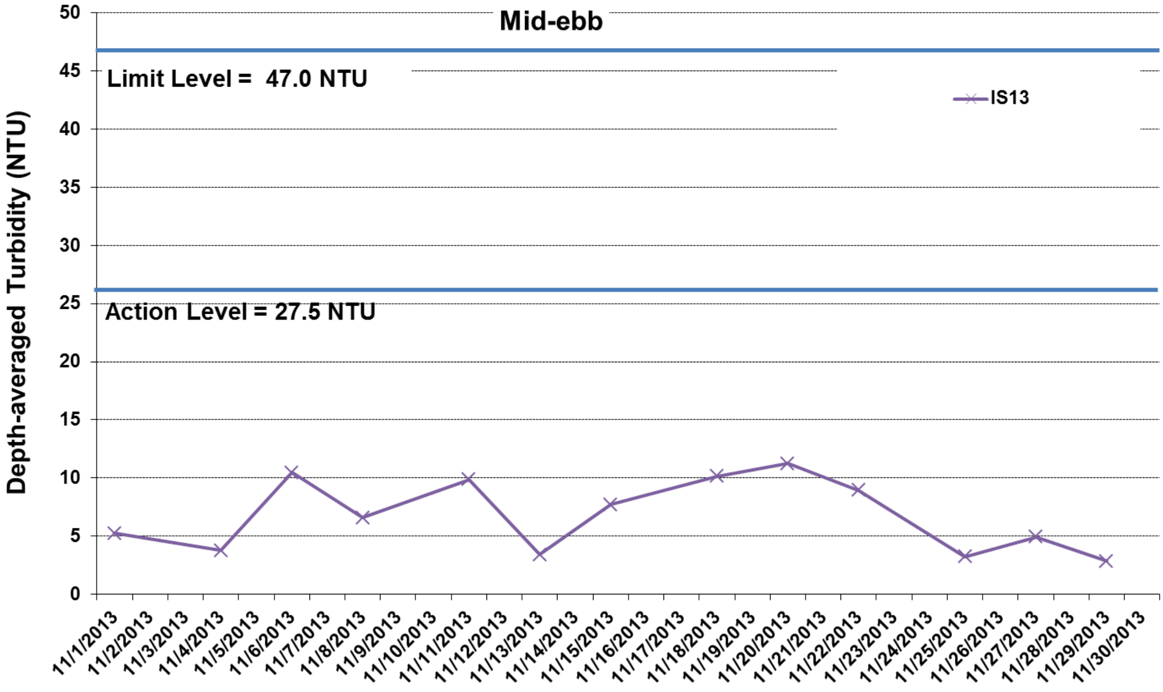


Figure I28 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at IS12.



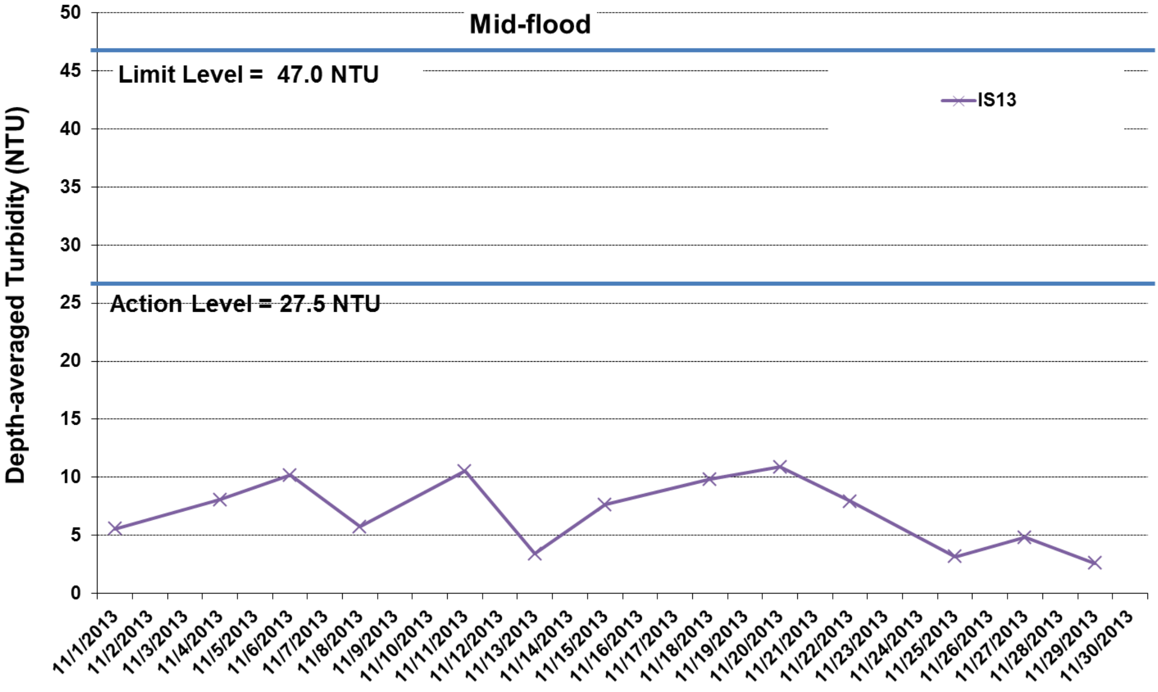


Figure I29 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at IS13.

ERM

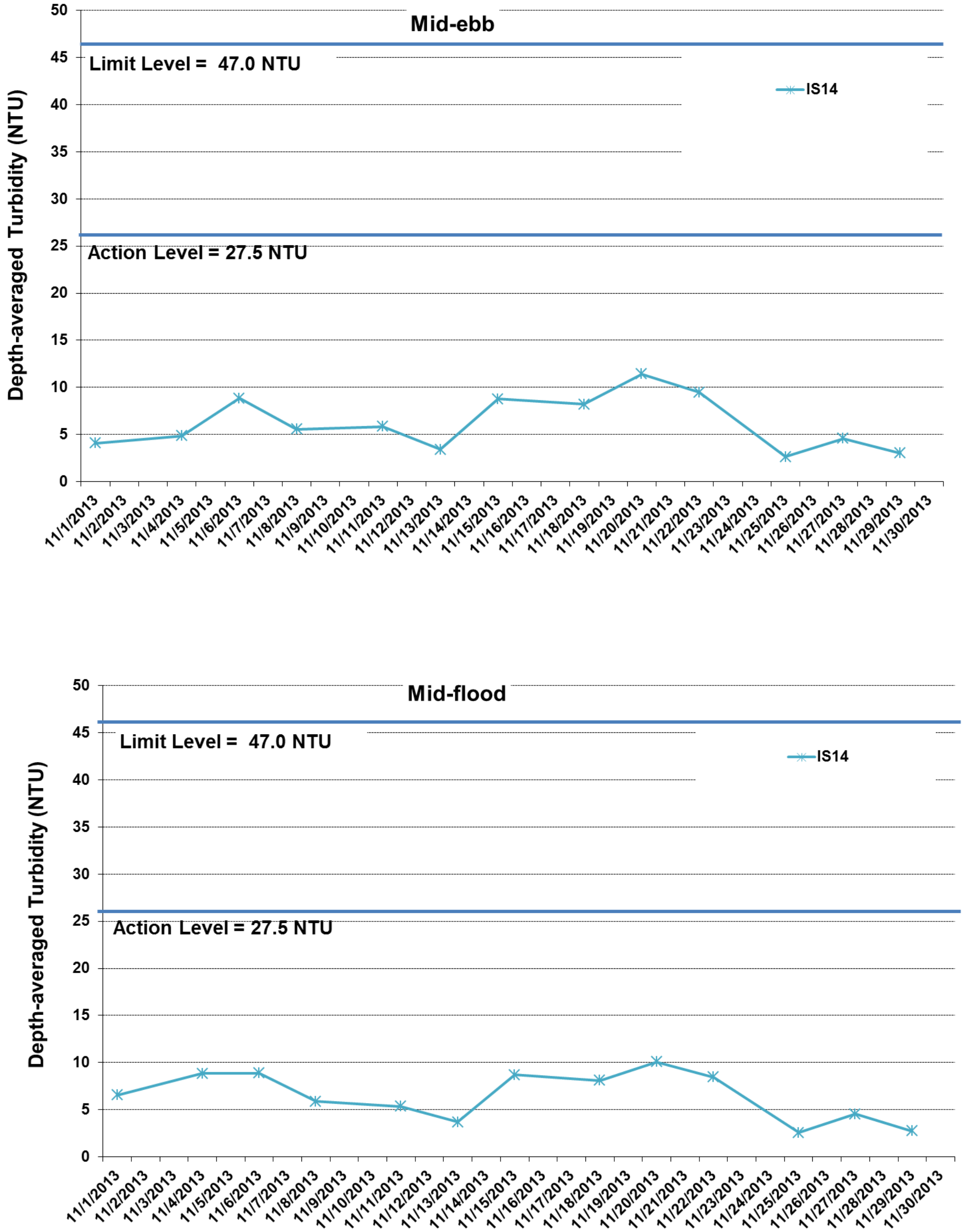


Figure I30 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at IS14.

ERM

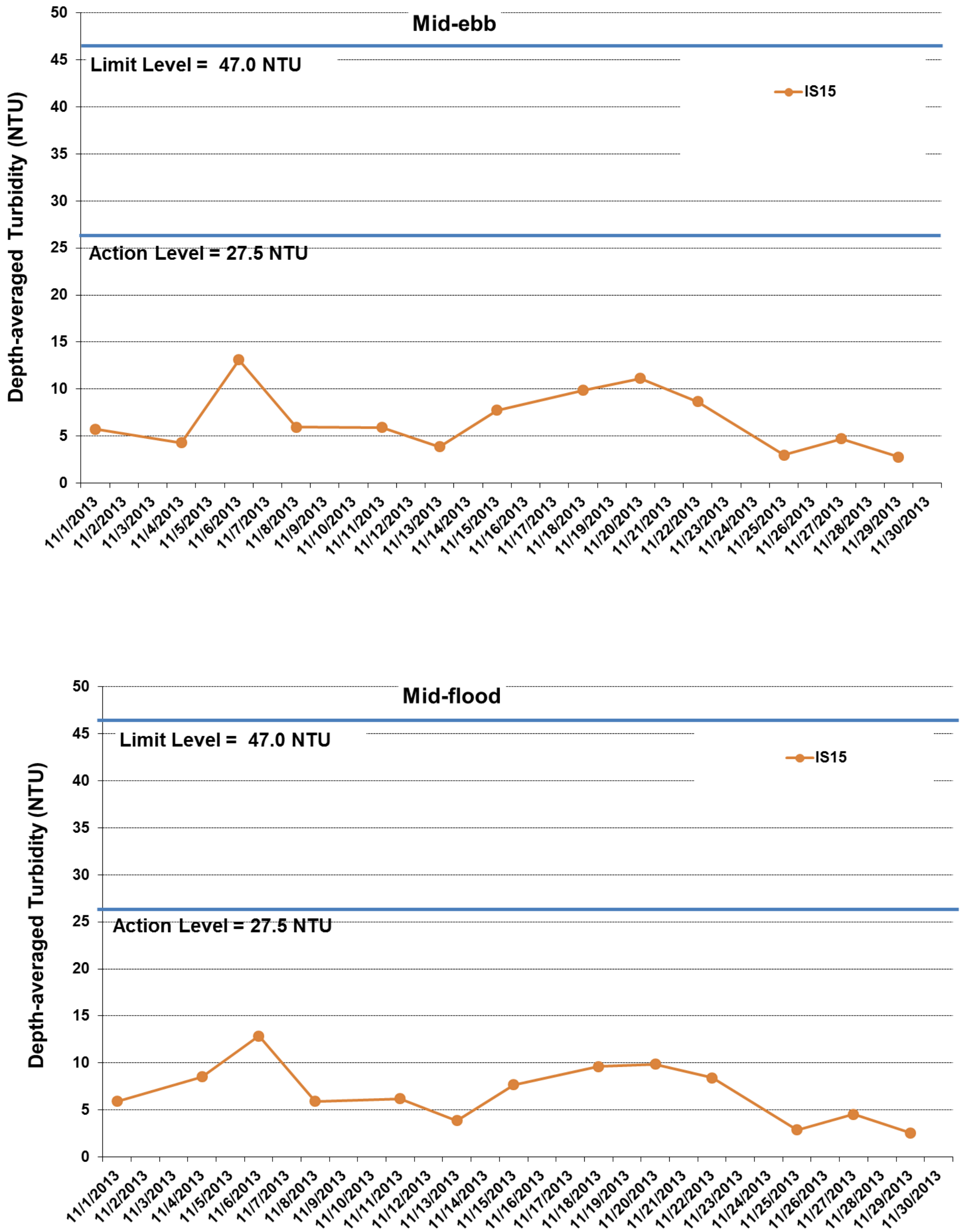
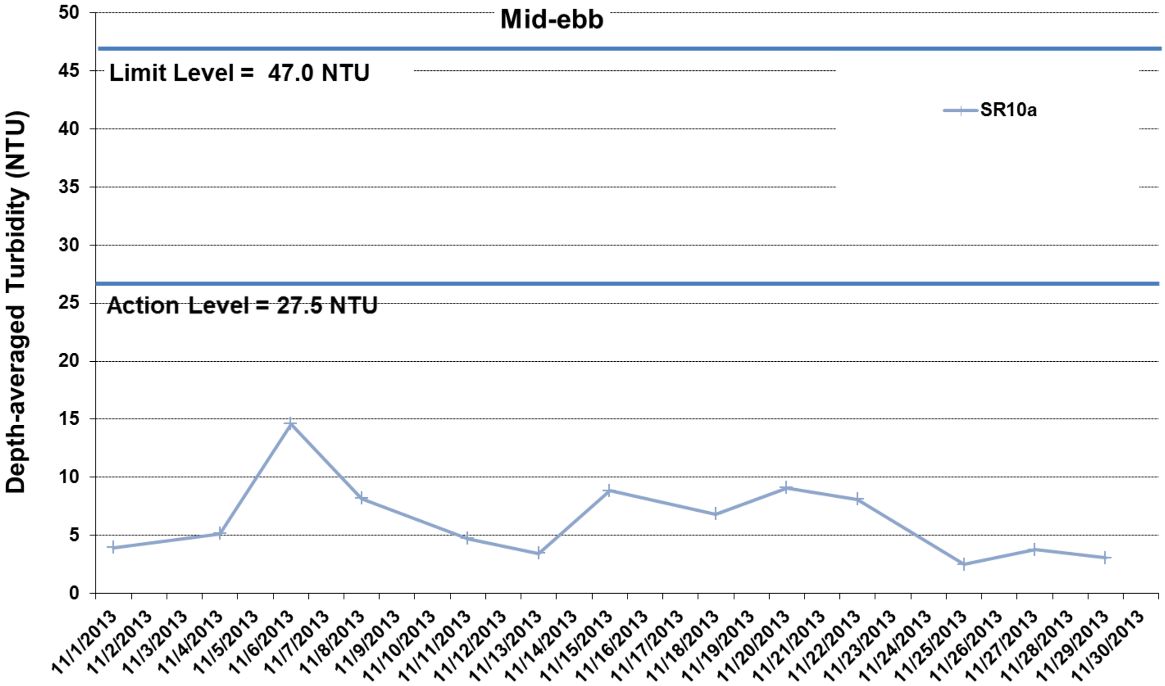


Figure I31 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at IS15.

ERM



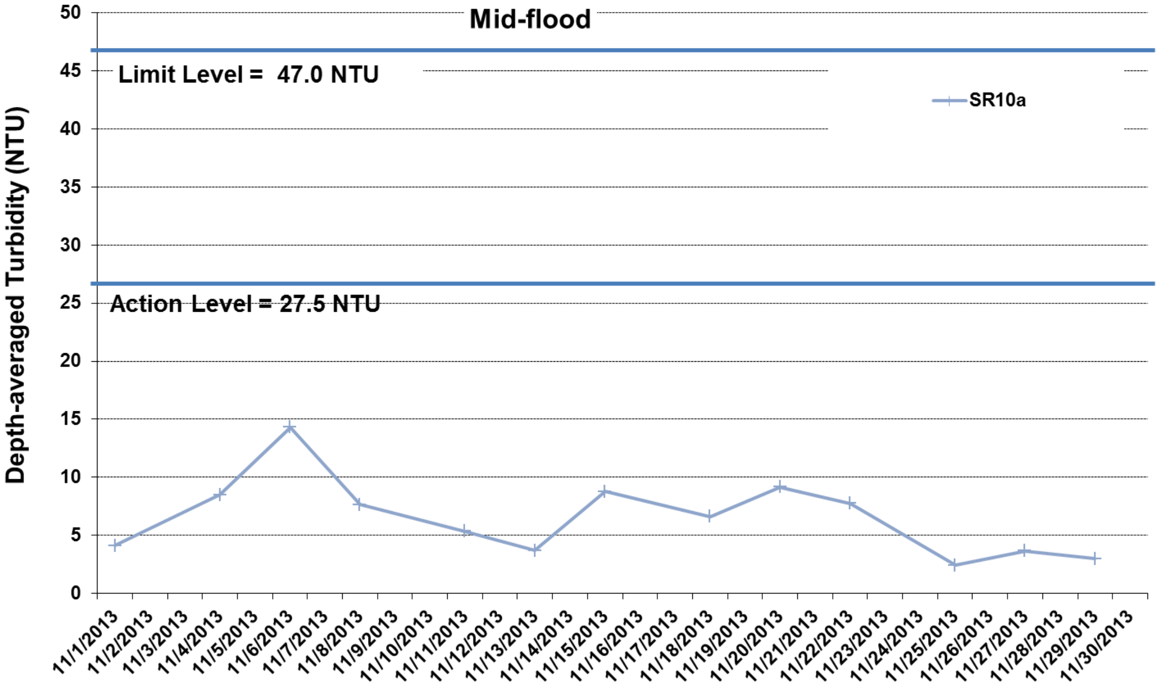
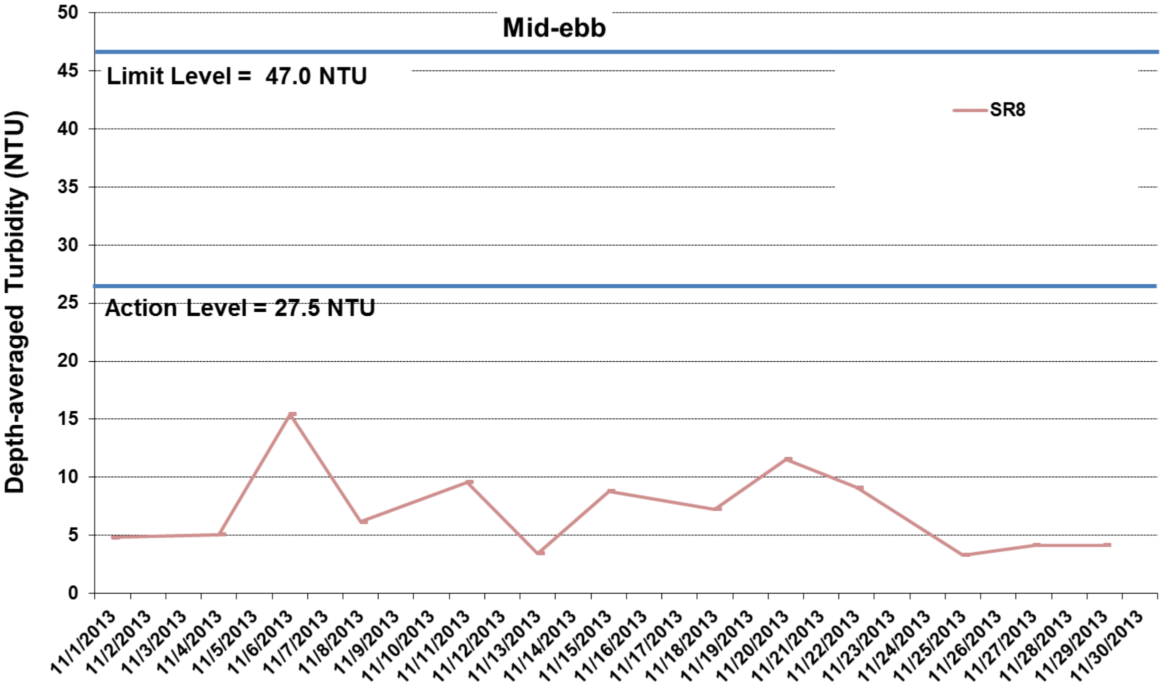


Figure I32 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at SR10a.

ERM



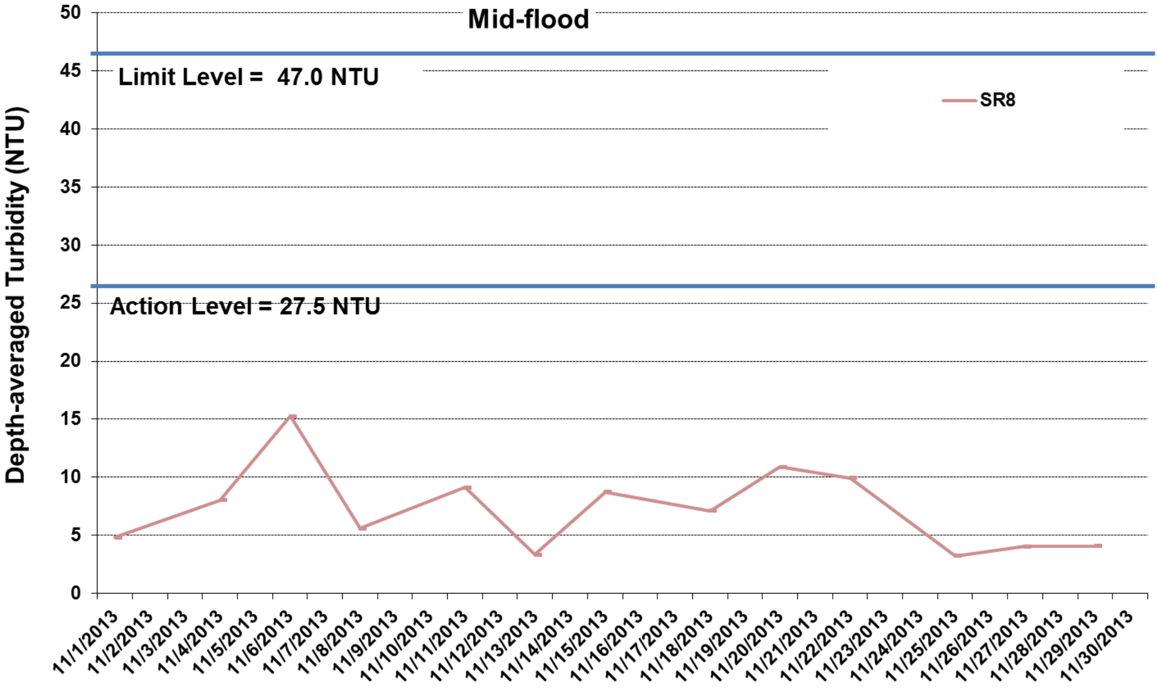
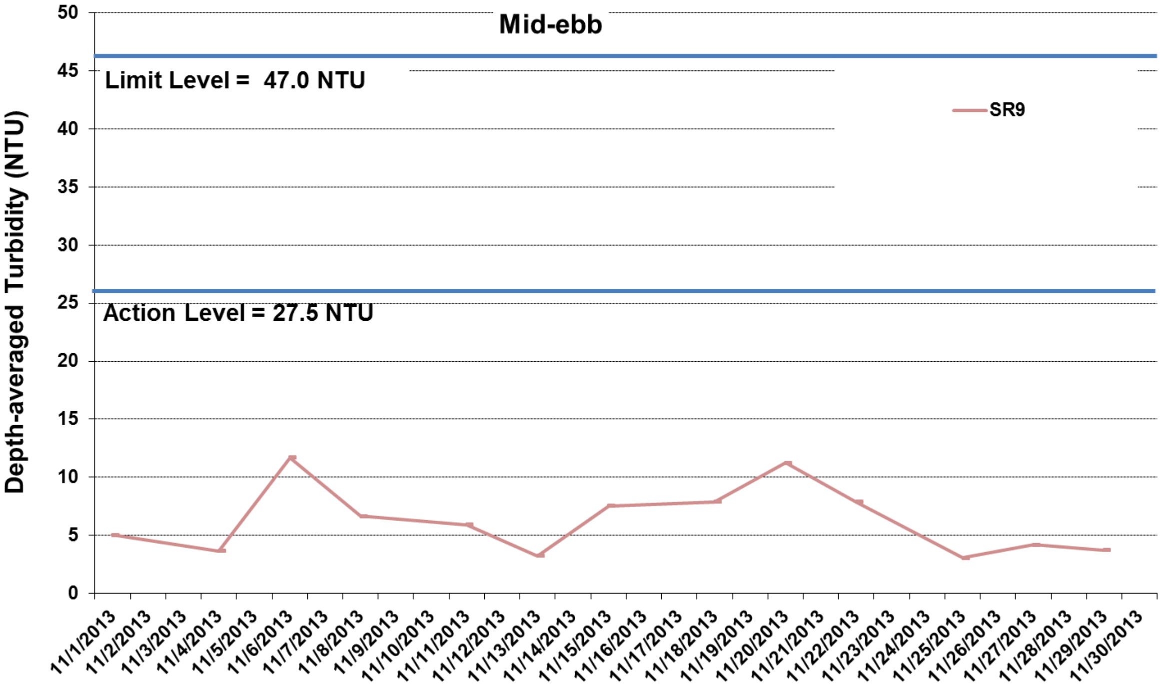


Figure I33 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at SR8.



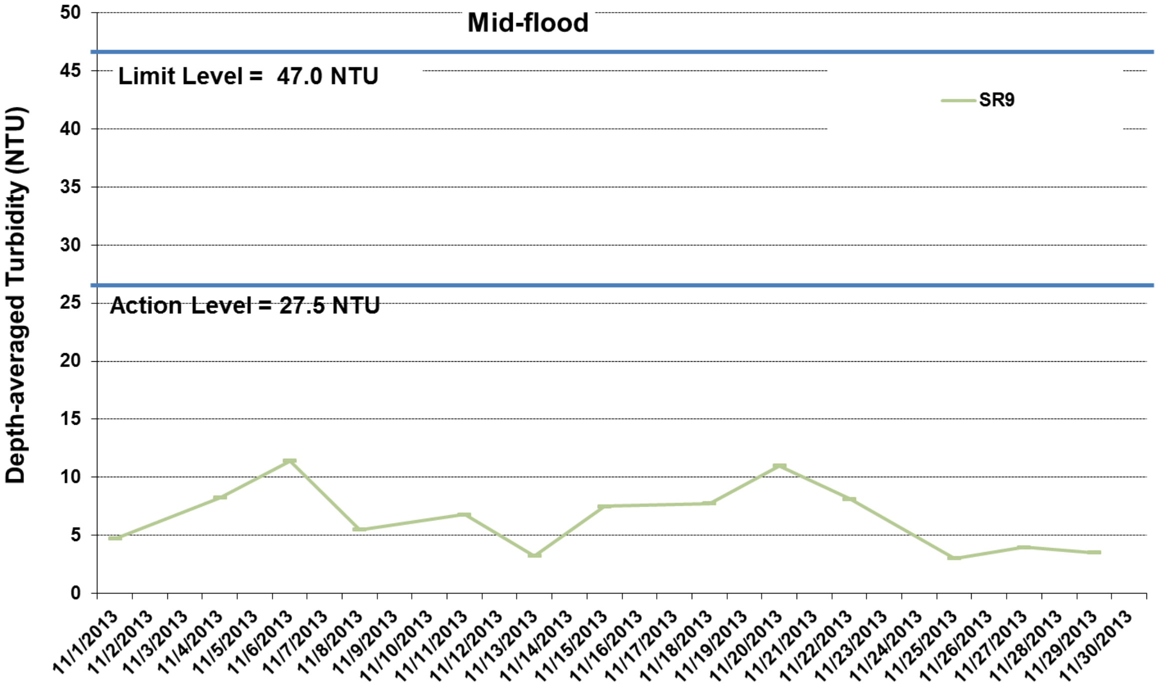
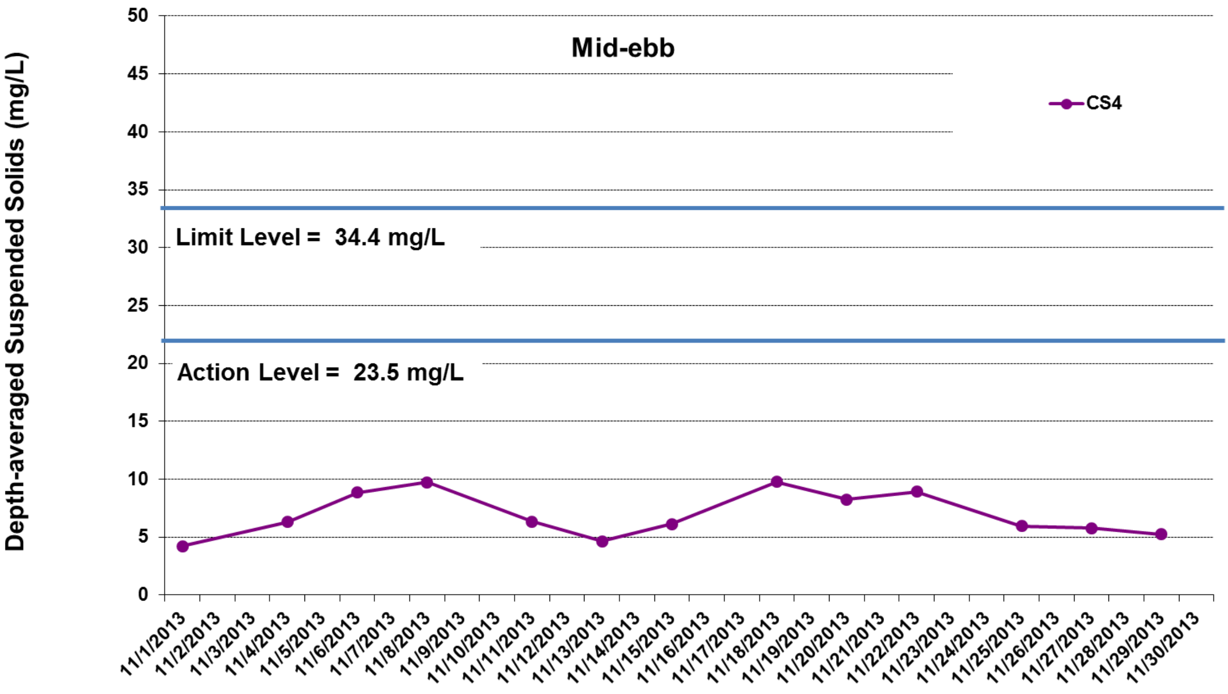


Figure I34 Impact Monitoring – Mean Depth-averaged Level of Turbidity (NTU) between 1 and 30 November 2013 at SR9.

ERM



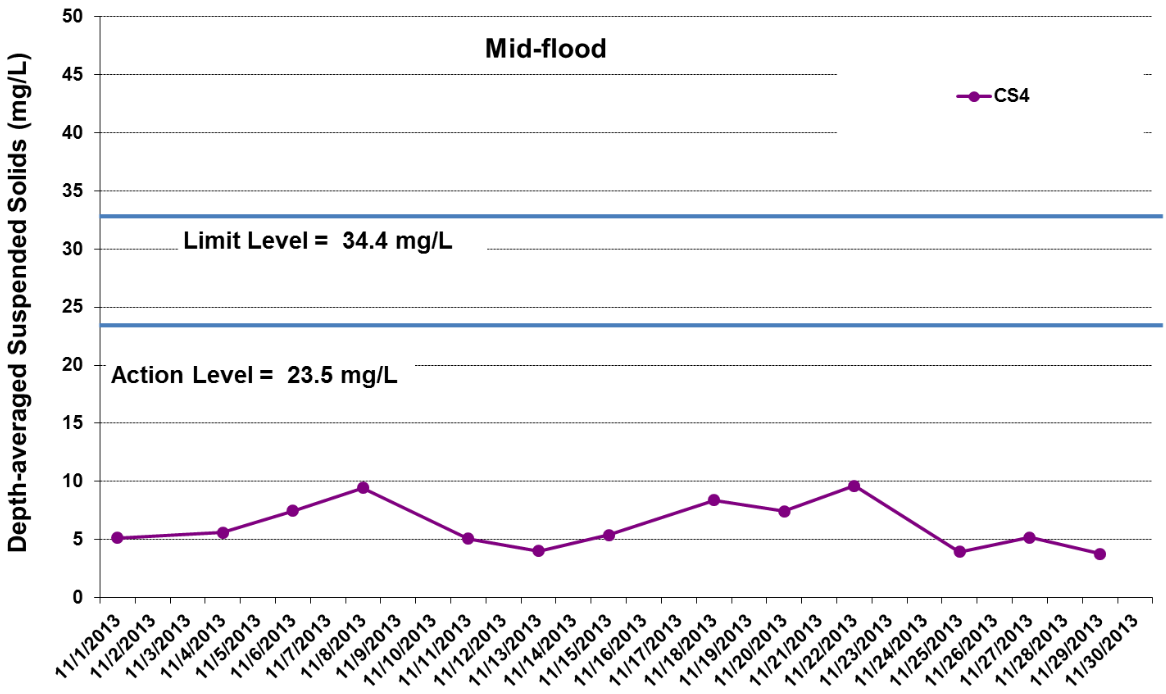


Figure I35 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at CS4.

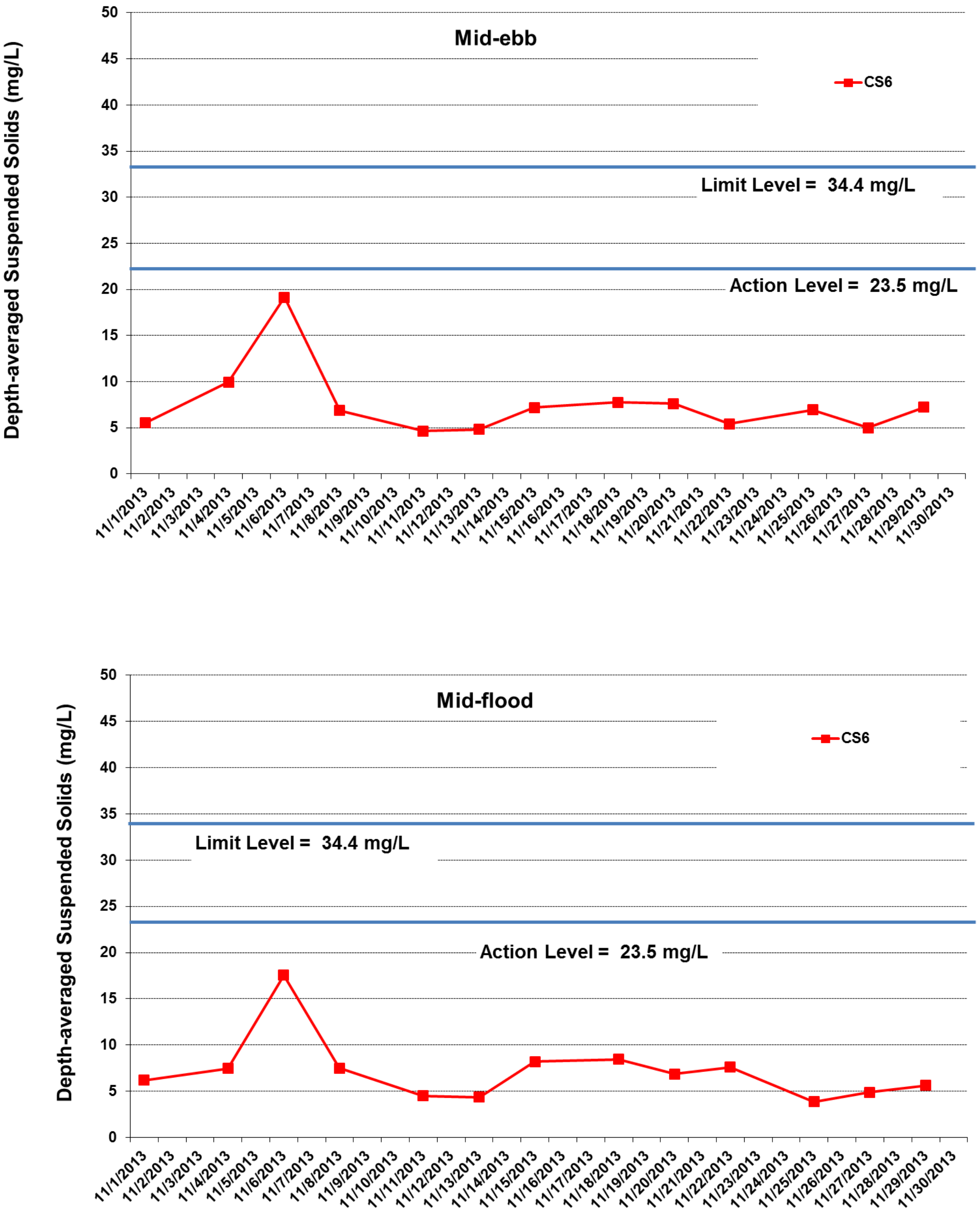


Figure I36 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at CS6.

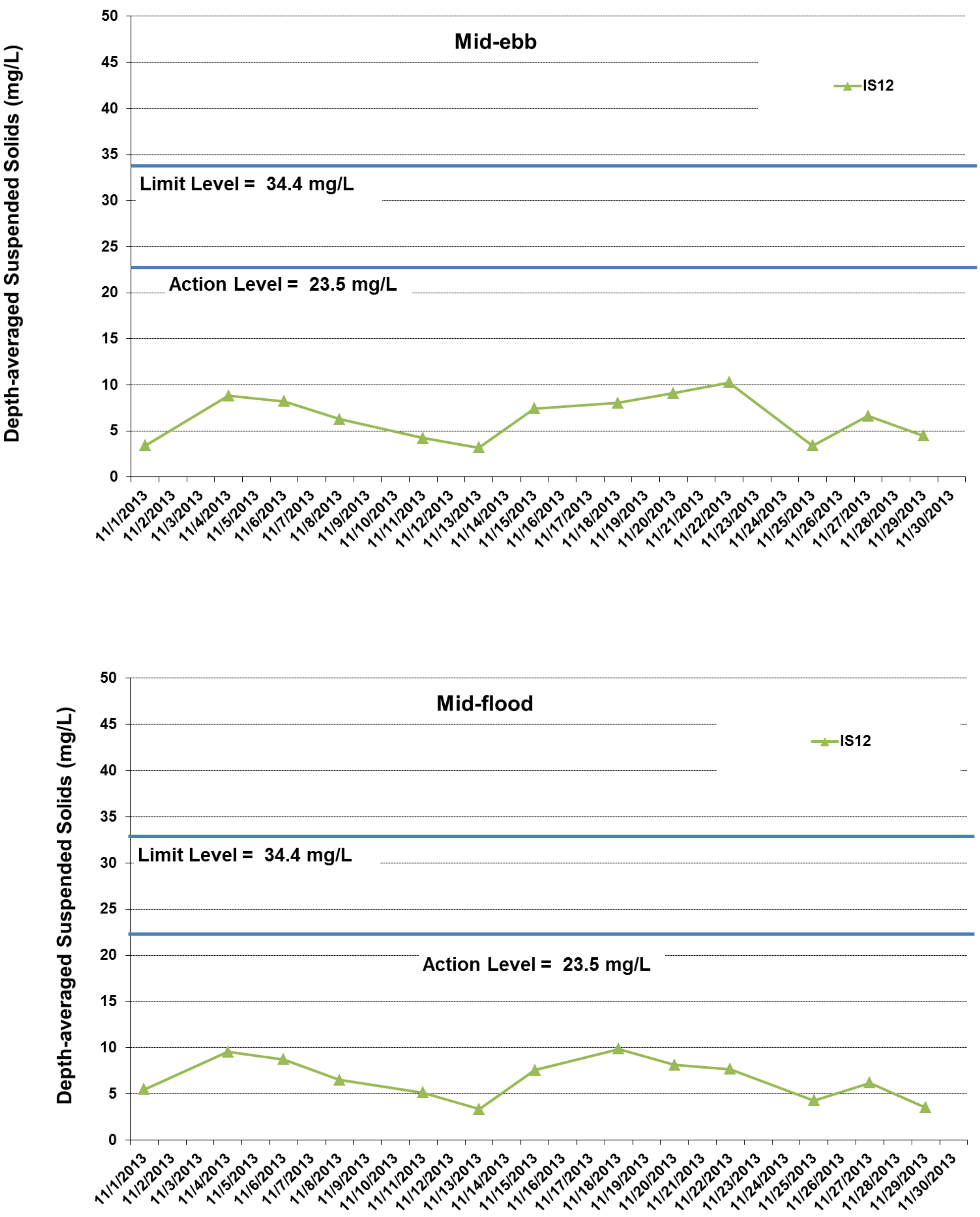
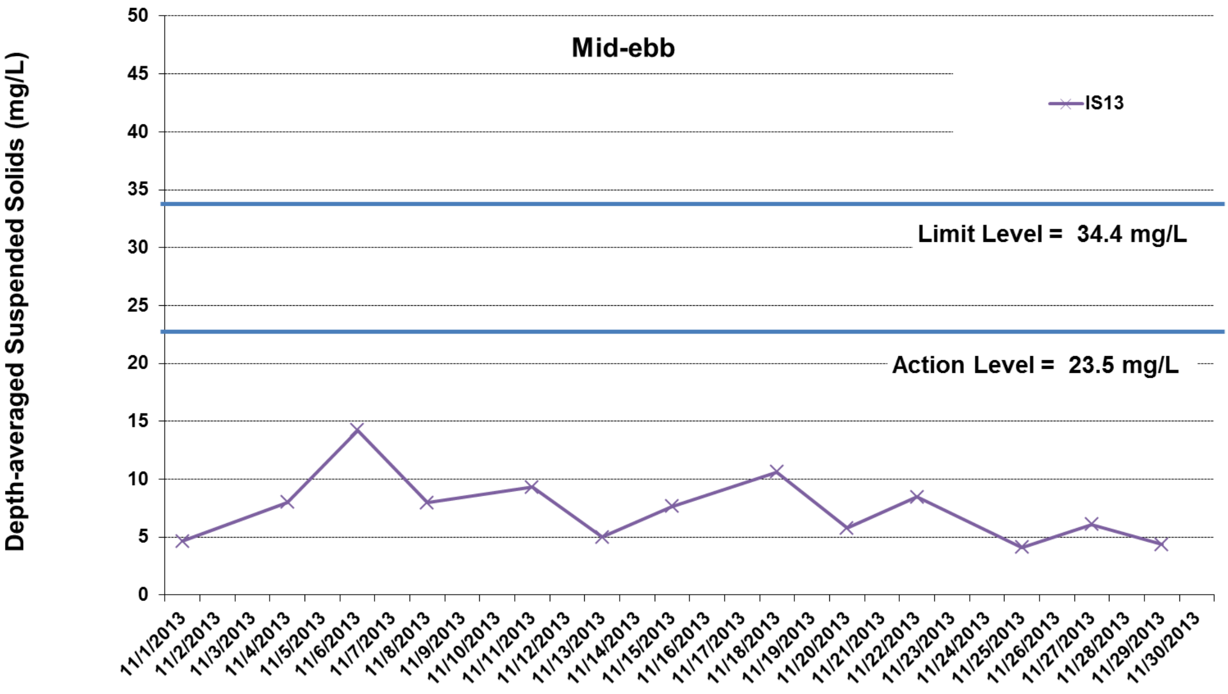


Figure I37 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at IS12.



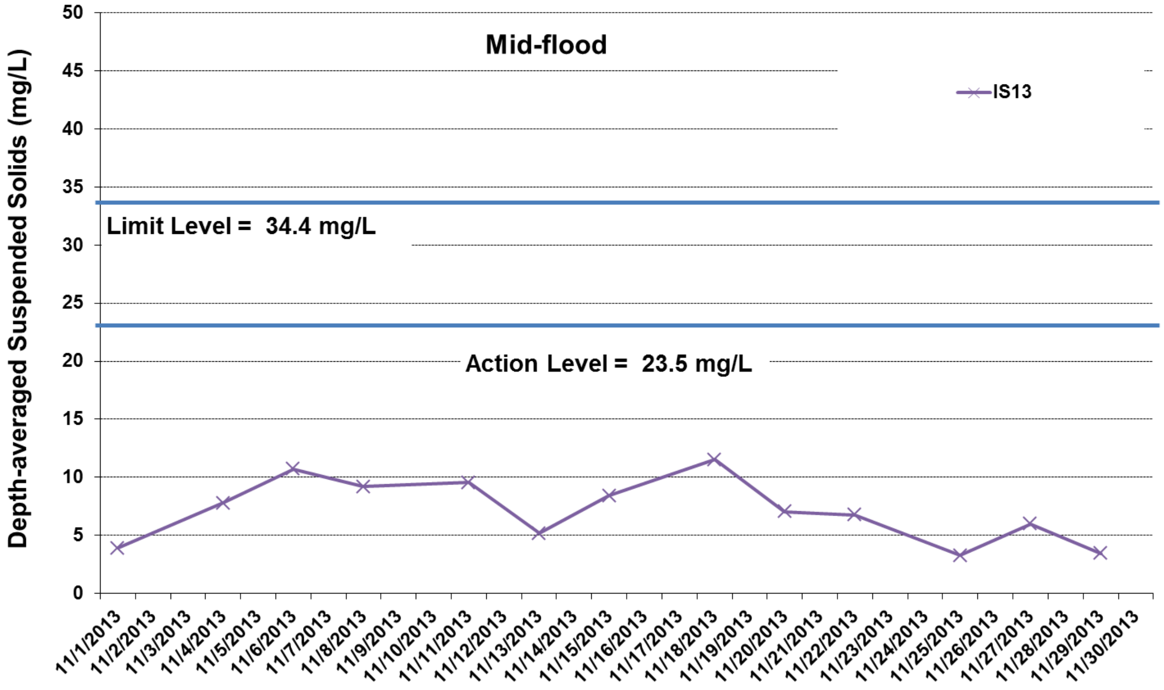
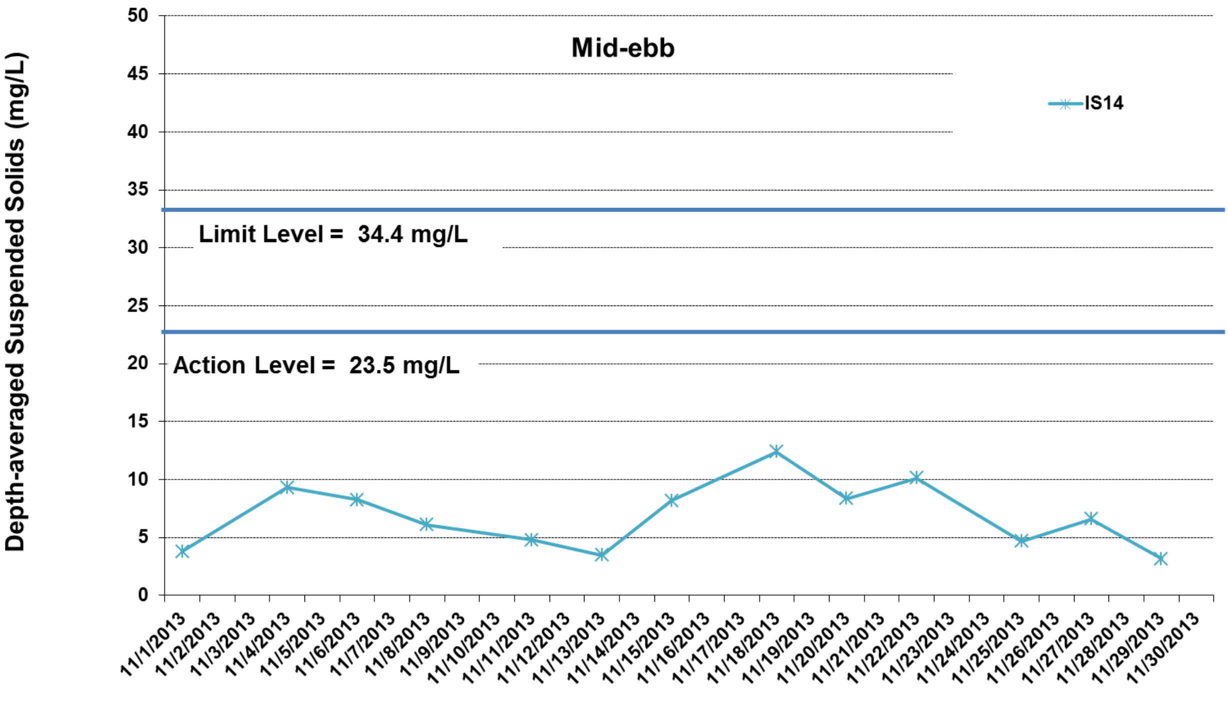


Figure I38 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at IS13.

ERM



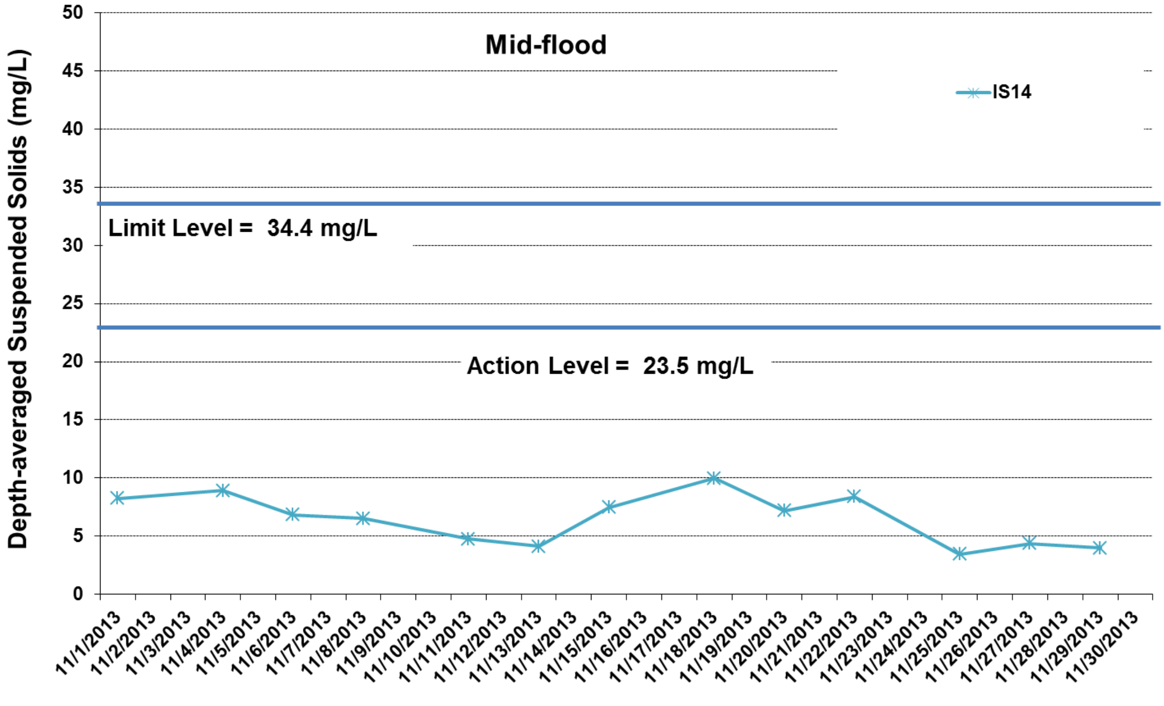
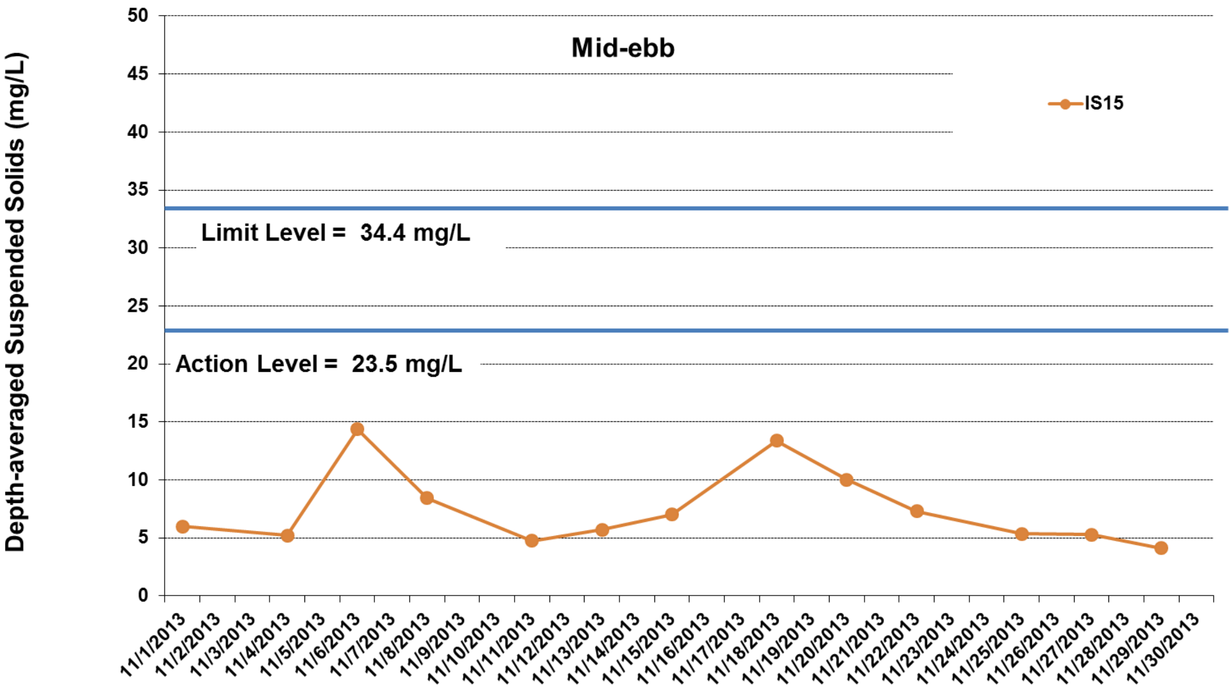


Figure I39 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at IS14.

ERM



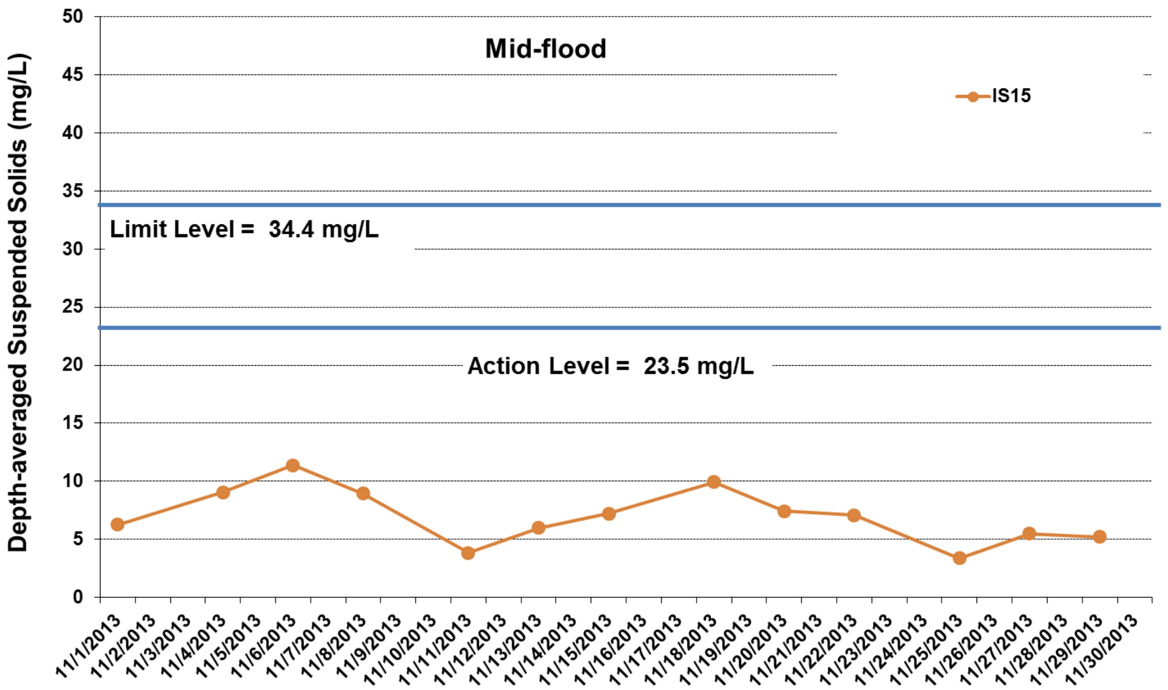


Figure I40 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at IS15.

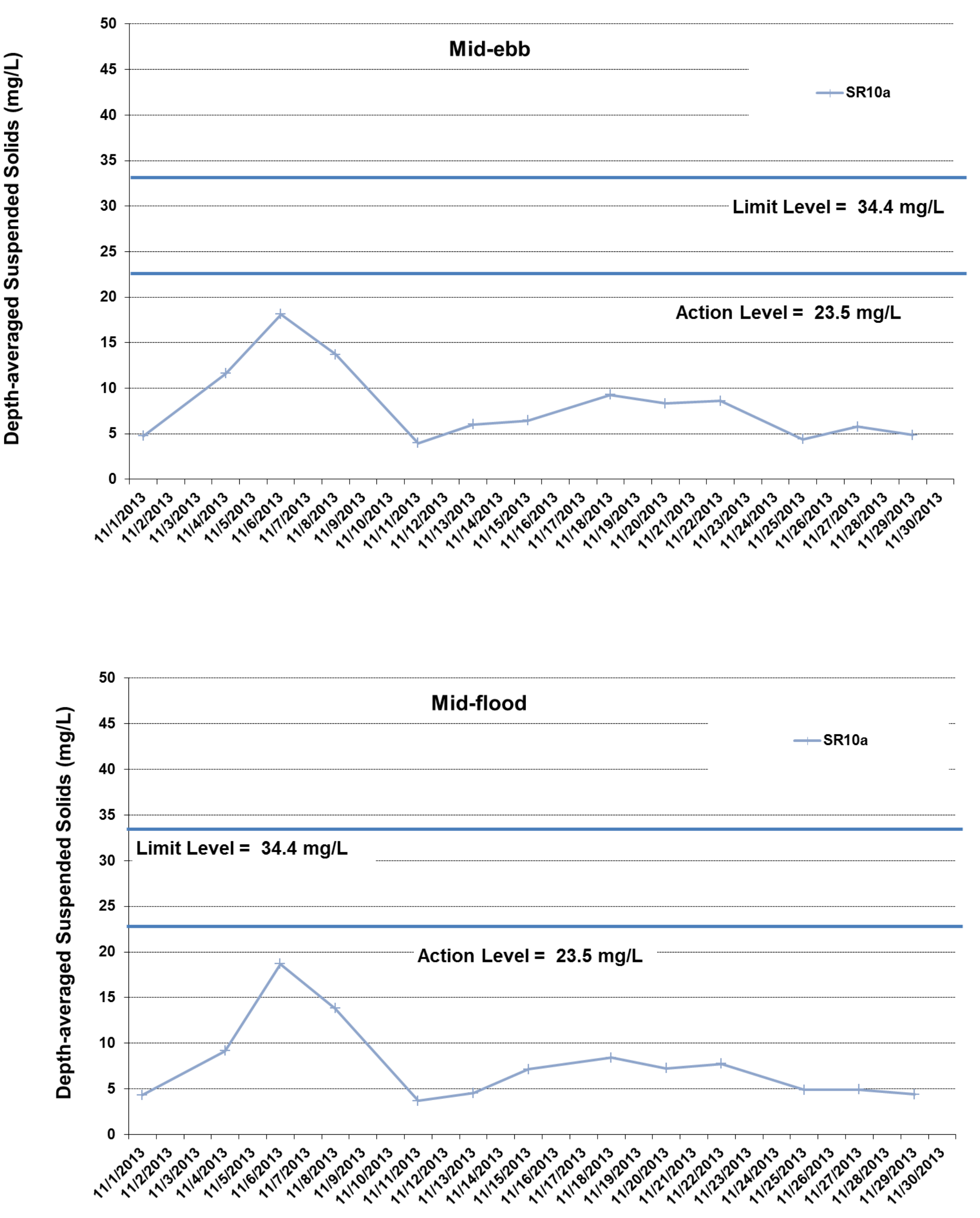
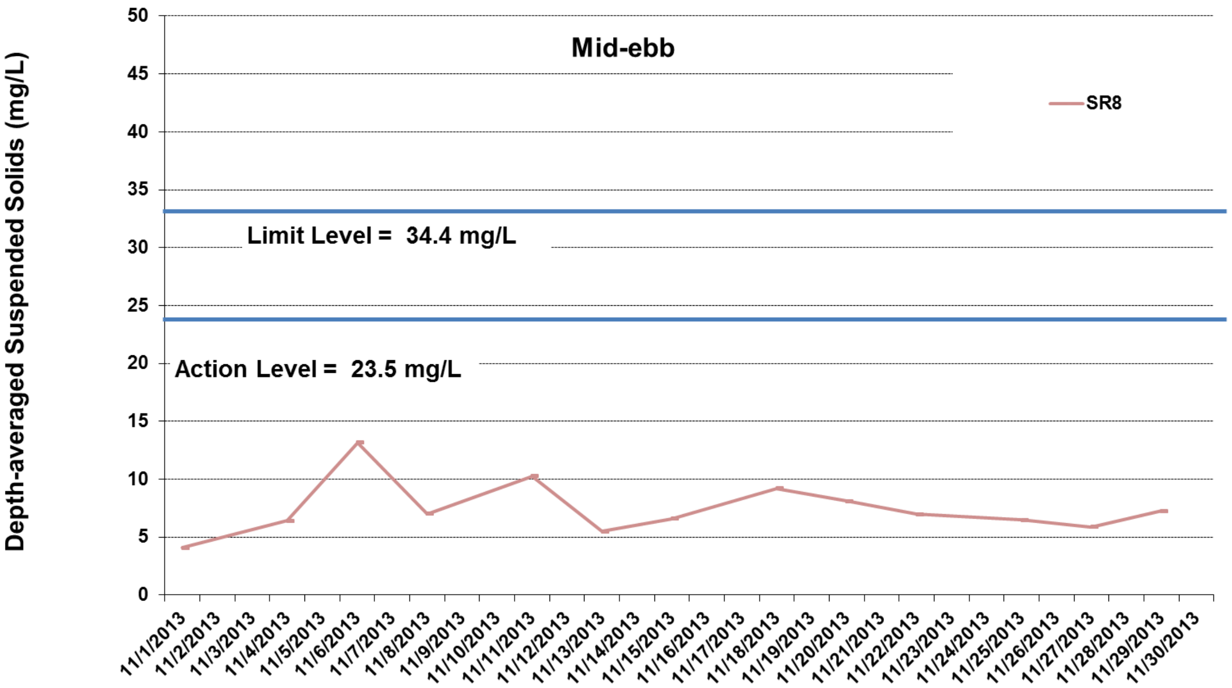


Figure I41 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at SR10a.



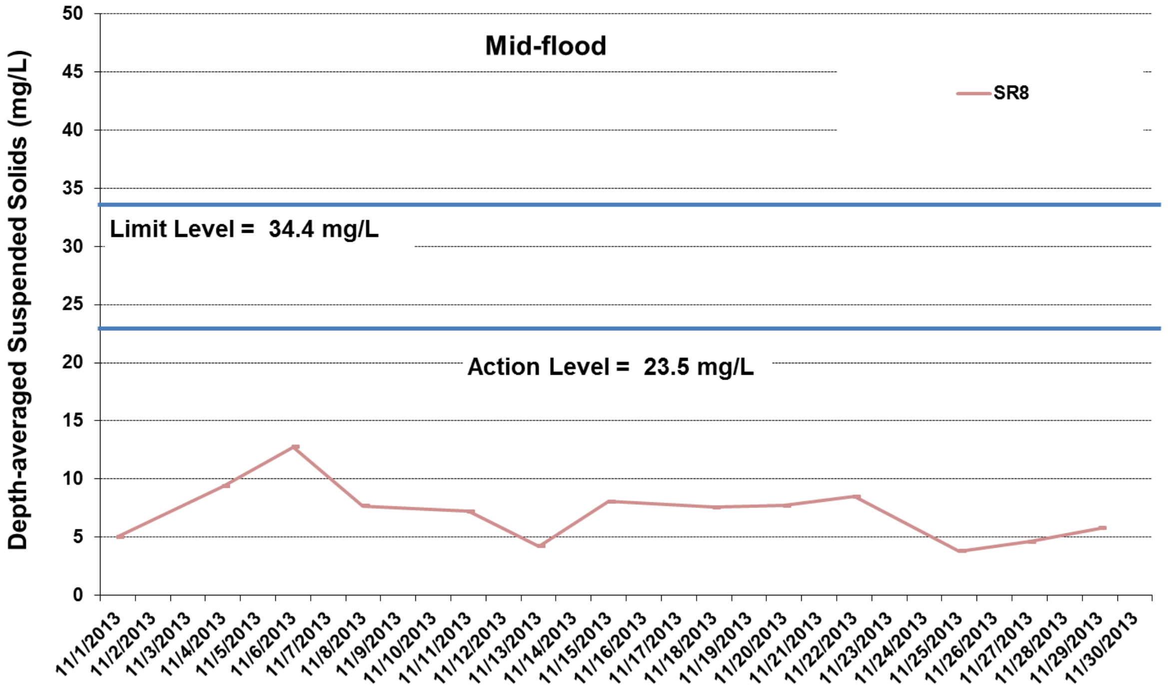
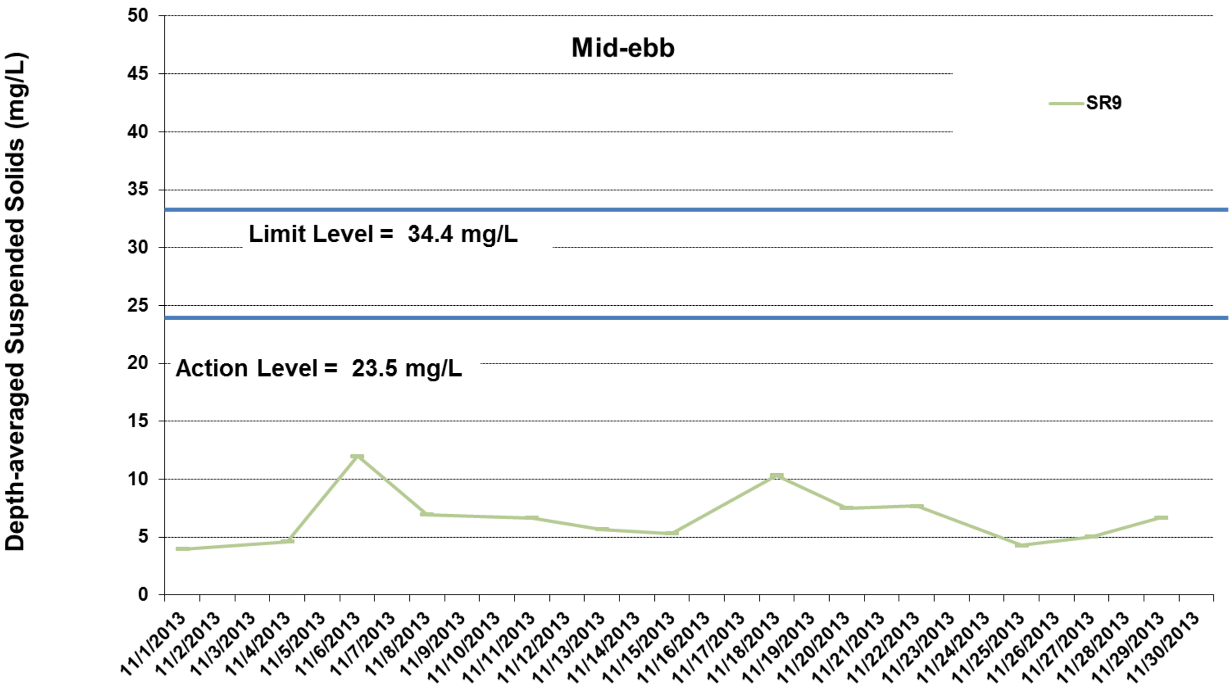


Figure I42 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at SR8.

ERM



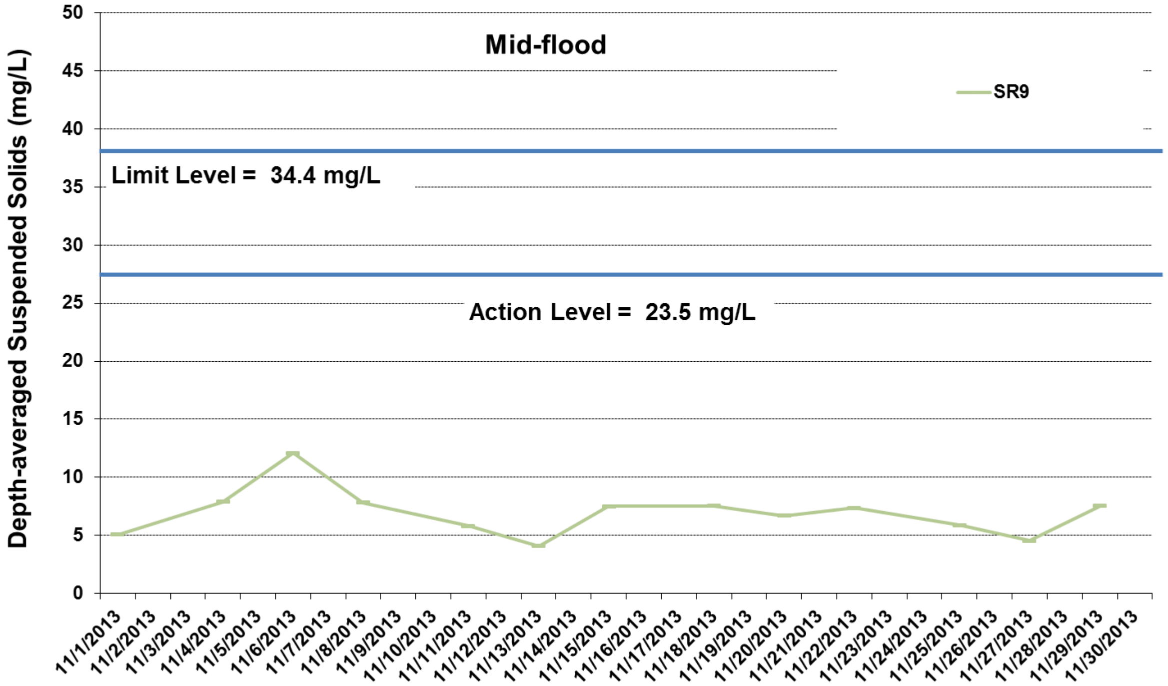


Figure I43 Impact Monitoring – Mean Depth-averaged Level of Suspended Solids (mg/L) between 1 and 30 November 2013 at SR9.

ERM

Project	**Works**	**Date (yyyy-**	**Tide**	**Stat**	**Level**	**Lev_C**	**Replica**	**Start Tim**	**End Time**	**Temp_v**	**pH_v**	**Sal_v**	**DO_v**	**Turb_v**	**SS_v**
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS4	Surface	1	1	18:16	18:30	26.2	7.72	23.2	8.42	4.77	5.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS4	Surface	1	2	18:16	18:30	26.1	7.71	23.3	8.43	4.79	4.5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS4	Middle	2	1	18:16	18:30	26.3	7.68	23.9	7.83	5.18	6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS4	Middle	2	2	18:16	18:30	26.3	7.69	23.9	7.81	5.12	4.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS4	Bottom	3	1	18:16	18:30	26.3	7.9	23.9	7.74	5.82	6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS4	Bottom	3	2	18:16	18:30	26.3	7.91	23.9	7.72	5.86	4.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS6	Surface	1	1	15:32	15:47	26.1	7.75	24.8	8.4	7.72	8.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS6	Surface	1	2	15:32	15:47	26.1	7.75	24.8	8.38	7.76	6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS6	Middle	2	1	15:32	15:47	25.9	7.72	25	7.74	7.24	4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS6	Middle	2	2	15:32	15:47	25.9	7.72	24.9	7.76	7.28	5.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS6	Bottom	3	1	15:32	15:47	25.8	7.74	25.1	7.64	7.4	6.5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	CS6	Bottom	3	2	15:32	15:47	25.9	7.74	25	7.6	7.48	6.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS12	Surface	1	1	18:16	18:30	25.9	7.69	24.3	8.03	4.91	3.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS12	Surface	1	2	18:16	18:30	25.9	7.68	24.4	8.05	4.93	5.5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS12	Middle	2	1	18:16	18:30	25.8	7.59	24.3	8.01	6.83	6.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS12	Middle	2	2	18:16	18:30	25.8	7.6	24.3	8.04	6.82	5.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS12	Bottom	3	1	18:16	18:30	25.8	7.7	24.4	8	7.06	5.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS12	Bottom	3	2	18:16	18:30	25.7	7.71	24.4	7.96	7.1	5.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS13	Surface	1	1	17:56	18:11	26.2	7.7	24.5	8.2	4.87	3.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS13	Surface	1	2	17:56	18:11	26.1	7.71	24.5	8.22	4.88	3.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS13	Middle	2	1	17:56	18:11	26	7.73	24.6	8.01	5.08	4.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS13	Middle	2	2	17:56	18:11	26	7.73	24.6	8.06	5.12	4.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS13	Bottom	3	1	17:56	18:11	25.9	7.76	24.6	7.92	6.71	4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS13	Bottom	3	2	17:56	18:11	25.9	7.76	24.7	7.94	6.75	3.7
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS14	Surface	1	1	18:34	18:49	26	7.7	24.9	7.42	6.62	7.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS14	Surface	1	2	18:34	18:49	26	7.7	24.9	7.48	6.66	5.7

TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS14	Middle	2	1	18:34	18:49	26	7.78	25	7.02	5.92	7.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS14	Middle	2	2	18:34	18:49	26	7.77	25.1	7.09	5.97	6.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS14	Bottom	3	1	18:34	18:49	25.9	7.94	25.2	7.13	7.04	11.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS14	Bottom	3	2	18:34	18:49	25.9	7.95	25.2	7.18	7.08	11.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS15	Surface	1	1	17:36	17:51	26	7.72	25	7.75	4.82	8.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS15	Surface	1	2	17:36	17:51	26	7.72	25	7.76	4.8	6.5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS15	Middle	2	1	17:36	17:51	25.9	7.71	25	7.57	5.78	5.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS15	Middle	2	2	17:36	17:51	25.9	7.71	25	7.55	5.76	5.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS15	Bottom	3	1	17:36	17:51	25.9	7.74	25	7.6	7.15	5.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	IS15	Bottom	3	2	17:36	17:51	25.9	7.74	25.1	7.55	7.1	6.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR8	Surface	1	1	16:52	17:06	26.1	7.7	25	8.36	4.86	5.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR8	Surface	1	2	16:52	17:06	26.1	7.71	25	8.34	4.9	6.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR8	Middle	2	1	16:52	17:06						
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR8	Middle	2	2	16:52	17:06						
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR8	Bottom	3	1	16:52	17:06	26	7.68	25.1	8.11	4.7	4.5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR8	Bottom	3	2	16:52	17:06	26	7.68	25.1	8.13	4.79	4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR9	Surface	1	1	17:16	17:31	26	7.76	25.1	8.4	4.58	3.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR9	Surface	1	2	17:16	17:31	26	7.76	25.1	8.34	4.6	3.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR9	Middle	2	1	17:16	17:31						
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR9	Middle	2	2	17:16	17:31						
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR9	Bottom	3	1	17:16	17:31	26	7.74	25.1	8.39	4.85	6.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR9	Bottom	3	2	17:16	17:31	25.9	7.74	25.1	8.38	4.88	6.7
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR10a	Surface	1	1	16:02	16:17	26	7.73	24.9	8.54	4.5	3.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR10a	Surface	1	2	16:02	16:17	26.1	7.73	24.9	8.5	4.47	4.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR10a	Middle	2	1	16:02	16:17	25.9	7.69	25	8.08	4.04	4.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR10a	Middle	2	2	16:02	16:17	25.9	7.69	25	8.1	4.06	3.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR10a	Bottom	3	1	16:02	16:17	25.9	7.6	25	8.12	3.84	4.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Flood	SR10a	Bottom	3	2	16:02	16:17	25.9	7.6	25	8.14	3.8	5.8

TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS4	Surface	1	1	09:30	09:47	25.4	7.48	23	8.29	4.04	3.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS4	Surface	1	2	09:30	09:47	25.4	7.47	23	8.25	4.09	4.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS4	Middle	2	1	09:30	09:47	25.6	7.52	24.6	7.55	4.49	3.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS4	Middle	2	2	09:30	09:47	25.6	7.51	24.5	7.58	4.56	5.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS4	Bottom	3	1	09:30	09:47	25.6	7.5	24.8	7.4	5.89	4.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS4	Bottom	3	2	09:30	09:47	25.6	7.5	24.8	7.37	5.85	5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS6	Surface	1	1	11:55	12:10	26	7.73	24.9	8.42	7.68	4.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS6	Surface	1	2	11:55	12:10	26	7.74	24.8	8.45	7.64	5.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS6	Middle	2	1	11:55	12:10	25.7	7.75	25.2	7.42	7.17	4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS6	Middle	2	2	11:55	12:10	25.7	7.75	25.2	7.39	7.12	5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS6	Bottom	3	1	11:55	12:10	25.7	7.77	25.2	7.35	7.39	8.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	CS6	Bottom	3	2	11:55	12:10	25.7	7.77	25.1	7.38	7.36	5.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS12	Surface	1	1	10:12	10:27	25.6	7.6	24.8	7.76	4.38	3.5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS12	Surface	1	2	10:12	10:27	25.6	7.61	24.7	7.73	4.35	2.7
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS12	Middle	2	1	10:12	10:27	25.6	7.64	24.9	7.34	3.34	3.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS12	Middle	2	2	10:12	10:27	25.6	7.64	24.9	7.36	3.3	3.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS12	Bottom	3	1	10:12	10:27	25.6	7.68	24.9	7.32	4.28	3.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS12	Bottom	3	2	10:12	10:27	25.6	7.68	24.9	7.29	4.22	3.7
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS13	Surface	1	1	10:32	10:47	25.6	7.69	25	7.22	4.89	4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS13	Surface	1	2	10:32	10:47	25.7	7.7	25	7.25	4.93	3.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS13	Middle	2	1	10:32	10:47	25.7	7.72	25	7.37	4.72	3.7
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS13	Middle	2	2	10:32	10:47	25.7	7.72	25	7.4	4.75	3.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS13	Bottom	3	1	10:32	10:47	25.6	7.74	25	7.32	6.07	7.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS13	Bottom	3	2	10:32	10:47	25.6	7.74	25	7.35	6.09	6.2
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS14	Surface	1	1	09:52	10:08	25.7	7.59	25	7.36	4.01	4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS14	Surface	1	2	09:52	10:08	25.7	7.58	25	7.4	4.05	3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS14	Middle	2	1	09:52	10:08	25.6	7.64	25.2	7.17	4.37	4.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS14	Middle	2	2	09:52	10:08	25.6	7.64	25.2	7.19	4.35	4.9

TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS14	Bottom	3	1	09:52	10:08	25.6	7.65	25.4	6.81	3.84	3.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS14	Bottom	3	2	09:52	10:08	25.6	7.64	25.4	6.85	3.8	3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS15	Surface	1	1	10:52	11:07	25.7	7.7	25.1	6.89	6.1	6.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS15	Surface	1	2	10:52	11:07	25.7	7.71	25.1	6.85	6.03	4.6
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS15	Middle	2	1	10:52	11:07	25.7	7.75	25.2	6.88	5.56	6.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS15	Middle	2	2	10:52	11:07	25.7	7.74	25.2	6.84	5.52	5.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS15	Bottom	3	1	10:52	11:07	25.6	7.75	25.3	6.66	5.6	5.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	IS15	Bottom	3	2	10:52	11:07	25.6	7.75	25.3	6.64	5.54	7.3
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR8	Surface	1	1	11:36	11:50	26	7.68	25	8.28	4.98	5
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR8	Surface	1	2	11:36	11:50	26	7.67	25	8.24	4.92	3.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR8	Middle	2	1	11:36	11:50						
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR8	Middle	2	2	11:36	11:50						
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR8	Bottom	3	1	11:36	11:50	25.7	7.7	25.1	8.04	4.64	3.4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR8	Bottom	3	2	11:36	11:50	25.7	7.71	25.1	8.01	4.68	4
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR9	Surface	1	1	11:12	11:26	25.7	7.74	24.9	7.15	5.13	4.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR9	Surface	1	2	11:12	11:26	25.7	7.74	24.9	7.13	5.1	3.8
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR9	Middle	2	1	11:12	11:26						
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR9	Middle	2	2	11:12	11:26						
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR9	Bottom	3	1	11:12	11:26	25.7	7.72	25.1	7.1	4.88	3.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR9	Bottom	3	2	11:12	11:26	25.7	7.72	25.1	7.07	4.94	4.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR10a	Surface	1	1	12:25	13:00	26	7.64	24.9	8.65	4.51	3.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR10a	Surface	1	2	12:25	13:00	26	7.65	24.8	8.61	4.57	3.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR10a	Middle	2	1	12:25	13:00	25.8	7.7	25.2	8.19	3.59	4.9
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR10a	Middle	2	2	12:25	13:00	25.8	7.71	25.2	8.15	3.63	3.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR10a	Bottom	3	1	12:25	13:00	25.8	7.69	25.2	8.06	3.62	7.1
TM-CLK Northern	HY/2012/08	2013-11-01	Mid-Ebb	SR10a	Bottom	3	2	12:25	13:00	25.8	7.7	25.2	8.04	3.66	6.5
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS4	Surface	1	1	20:21	20:38	25.7	8.42	25.3	6.74	6.95	6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS4	Surface	1	2	20:21	20:38	25.7	8.46	25.4	6.78	6.74	5.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS4	Middle	2	1	20:21	20:38	25.6	8.48	25.4	6.72	6.87	6.1

TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS4	Middle	2	2	20:21	20:38	25.5	8.45	25.5	6.66	7.18	5.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS4	Bottom	3	1	20:21	20:38	25.4	8.5	25.5	6.59	6.63	4.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS4	Bottom	3	2	20:21	20:38	25.5	8.49	25.6	6.55	6.52	5.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS6	Surface	1	1	17:08	17:23	25.5	7.64	25.7	6.43	8.68	7.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS6	Surface	1	2	17:08	17:23	25.6	7.58	25.8	6.37	8.61	8.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS6	Middle	2	1	17:08	17:23	25.5	7.47	25.9	6.31	8.15	5.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS6	Middle	2	2	17:08	17:23	25.4	7.52	25.8	6.33	7.99	7.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS6	Bottom	3	1	17:08	17:23	25.3	7.27	25.8	6.23	9.05	7.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	CS6	Bottom	3	2	17:08	17:23	25.4	7.3	25.9	6.22	9.18	7.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS12	Surface	1	1	19:48	20:03	25.4	8.4	25.6	6.55	7.88	9.8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS12	Surface	1	2	19:48	20:03	25.5	8.37	25.7	6.58	8.1	10.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS12	Middle	2	1	19:48	20:03	25.5	8.44	25.7	6.61	8.51	9.4
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS12	Middle	2	2	19:48	20:03	25.5	8.45	25.8	6.59	8.71	10
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS12	Bottom	3	1	19:48	20:03	25.4	8.45	25.8	6.49	8.11	7.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS12	Bottom	3	2	19:48	20:03	25.3	8.47	25.7	6.51	8.75	9.8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS13	Surface	1	1	19:21	19:34	25.4	8.05	25.6	6.58	7.74	6.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS13	Surface	1	2	19:21	19:34	25.5	8.07	25.7	6.6	7.97	8.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS13	Middle	2	1	19:21	19:34	25.5	8.17	25.7	6.5	7.67	8.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS13	Middle	2	2	19:21	19:34	25.4	8.22	25.7	6.48	7.35	7.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS13	Bottom	3	1	19:21	19:34	25.3	8.26	25.8	6.39	8.85	8.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS13	Bottom	3	2	19:21	19:34	25.3	8.3	25.8	6.37	8.71	8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS14	Surface	1	1	20:10	20:14	25.6	8.45	25.7	6.28	9.7	8.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS14	Surface	1	2	20:10	20:14	25.5	8.42	25.6	6.32	8.75	9.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS14	Middle	2	1	20:10	20:14	25.5	8.48	25.8	6.36	8.99	9.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS14	Middle	2	2	20:10	20:14	25.6	8.47	25.8	6.33	9.18	9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS14	Bottom	3	1	20:10	20:14	25.5	8.42	25.8	6.31	8.22	8.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS14	Bottom	3	2	20:10	20:14	25.5	8.44	25.7	6.34	8.15	8.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS15	Surface	1	1	18:53	19:07	25.5	8.27	25.7	6.59	7.72	8.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS15	Surface	1	2	18:53	19:07	25.5	8.29	25.6	6.56	8.08	8.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS15	Middle	2	1	18:53	19:07	25.5	8.33	25.7	6.52	8.49	10.1
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS15	Middle	2	2	18:53	19:07	25.4	8.31	25.7	6.54	8.45	9.1
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS15	Bottom	3	1	18:53	19:07	25.3	8.36	25.7	6.46	9.42	8.4
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	IS15	Bottom	3	2	18:53	19:07	25.4	8.35	25.8	6.48	8.99	9.4
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR8	Surface	1	1	18:01	18:16	25.6	7.78	25.7	6.45	7.64	8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR8	Surface	1	2	18:01	18:16	25.5	7.8	25.6	6.43	7.51	9.4
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR8	Middle	2	1	18:01	18:16						
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR8	Middle	2	2	18:01	18:16						
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR8	Bottom	3	1	18:01	18:16	25.5	7.7	25.7	6.54	8.65	9.1
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR8	Bottom	3	2	18:01	18:16	25.4	7.73	25.7	6.56	8.29	10.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR9	Surface	1	1	18:31	18:43	25.5	8.37	25.6	6.77	7.99	6.5
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR9	Surface	1	2	18:31	18:43	25.4	8.38	25.7	6.72	7.91	8.3

TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR9	Middle	2	1	18:31	18:43						
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR9	Middle	2	2	18:31	18:43						
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR9	Bottom	3	1	18:31	18:43	25.5	8.47	25.8	6.5	8.46	8.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR9	Bottom	3	2	18:31	18:43	25.5	8.44	25.9	6.48	8.65	8.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR10a	Surface	1	1	17:38	17:53	25.5	6.69	25.9	6.08	7.97	6.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR10a	Surface	1	2	17:38	17:53	25.4	6.74	25.9	6.05	7.83	8.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR10a	Middle	2	1	17:38	17:53	25.5	6.76	26.1	6.07	8.58	10.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR10a	Middle	2	2	17:38	17:53	25.5	6.79	26	6.12	8.41	8.4
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR10a	Bottom	3	1	17:38	17:53	25.4	6.84	26.2	5.99	8.9	10.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Flood	SR10a	Bottom	3	2	17:38	17:53	25.3	6.87	26.3	5.97	9.32	10.5
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS4	Surface	1	1	11:40	11:55	25.7	8.39	25.3	6.65	6.4	5.8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS4	Surface	1	2	11:40	11:55	25.8	8.41	25.3	6.7	6.63	4
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS4	Middle	2	1	11:40	11:55	25.7	8.43	25.3	6.63	6.51	6.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS4	Middle	2	2	11:40	11:55	25.7	8.4	25.4	6.57	7.3	5.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS4	Bottom	3	1	11:40	11:55	25.5	8.47	25.5	6.5	7.29	7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS4	Bottom	3	2	11:40	11:55	25.6	8.45	25.5	6.46	8.8	8.5
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS6	Surface	1	1	14:15	14:30	25.4	7.61	25.8	6.34	9.73	10
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS6	Surface	1	2	14:15	14:30	25.4	7.55	25.7	6.28	8.86	10.8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS6	Middle	2	1	14:15	14:30	25.4	7.44	25.8	6.22	6.92	10
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS6	Middle	2	2	14:15	14:30	25.4	7.48	25.8	6.24	5.56	9.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS6	Bottom	3	1	14:15	14:30	25.4	7.24	25.9	6.14	4.36	10
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	CS6	Bottom	3	2	14:15	14:30	25.4	7.27	25.9	6.13	5.03	9.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS12	Surface	1	1	12:27	12:43	25.4	8.38	25.6	6.46	3.57	9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS12	Surface	1	2	12:27	12:43	25.4	8.35	25.6	6.49	3.56	7.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS12	Middle	2	1	12:27	12:43	25.4	8.41	25.6	6.52	3.23	9.5
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS12	Middle	2	2	12:27	12:43	25.4	8.44	25.7	6.5	3.71	9.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS12	Bottom	3	1	12:27	12:43	25.4	8.43	25.7	6.4	3.14	8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS12	Bottom	3	2	12:27	12:43	25.4	8.44	25.7	6.42	4.68	9.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS13	Surface	1	1	12:50	13:07	25.4	8.02	25.6	6.49	3.22	9.2
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS13	Surface	1	2	12:50	13:07	25.4	8.04	25.6	6.51	3.44	8.1
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS13	Middle	2	1	12:50	13:07	25.4	8.14	25.6	6.41	4.09	8.1
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS13	Middle	2	2	12:50	13:07	25.4	8.19	25.6	6.39	3.74	5.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS13	Bottom	3	1	12:50	13:07	25.4	8.23	25.6	6.3	3.32	9.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS13	Bottom	3	2	12:50	13:07	25.3	8.27	25.7	6.28	4.79	7.5
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS14	Surface	1	1	12:03	12:20	25.4	8.43	25.7	6.19	5.41	8.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS14	Surface	1	2	12:03	12:20	25.5	8.4	25.7	6.23	4.64	10.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS14	Middle	2	1	12:03	12:20	25.5	8.44	25.7	6.27	5.24	7.8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS14	Middle	2	2	12:03	12:20	25.5	8.45	25.8	6.24	4.99	6.3
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS14	Bottom	3	1	12:03	12:20	25.5	8.41	25.7	6.22	3.94	10.8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS14	Bottom	3	2	12:03	12:20	25.4	8.43	25.6	6.25	4.87	11.5
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS15	Surface	1	1	13:14	13:30	25.4	8.25	25.6	6.5	4.91	4.3

TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS15	Surface	1	2	13:14	13:30	25.4	8.27	25.6	6.47	4.09	6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS15	Middle	2	1	13:14	13:30	25.4	8.3	25.6	6.43	4.73	4.1
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS15	Middle	2	2	13:14	13:30	25.4	8.27	25.6	6.45	5.08	4.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS15	Bottom	3	1	13:14	13:30	25.4	8.34	25.6	6.37	3.55	6.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	IS15	Bottom	3	2	13:14	13:30	25.3	8.33	25.6	6.39	3.26	5.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR8	Surface	1	1	14:03	14:17	25.4	7.76	25.6	6.36	5.78	6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR8	Surface	1	2	14:03	14:17	25.4	7.77	25.6	6.34	5.48	6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR8	Middle	2	1	14:03	14:17						
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR8	Middle	2	2	14:03	14:17						
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR8	Bottom	3	1	14:03	14:17	25.4	7.67	25.6	6.45	4.63	6.7
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR8	Bottom	3	2	14:03	14:17	25.4	7.68	25.6	6.47	4.43	6.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR9	Surface	1	1	13:36	13:51	25.4	8.34	25.6	6.68	3.66	3.9
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR9	Surface	1	2	13:36	13:51	25.4	8.36	25.6	6.63	3.59	4.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR9	Middle	2	1	13:36	13:51						
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR9	Middle	2	2	13:36	13:51						
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR9	Bottom	3	1	13:36	13:51	25.4	8.45	25.7	6.41	3.65	4.6
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR9	Bottom	3	2	13:36	13:51	25.4	8.42	25.8	6.39	3.64	5.4
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR10a	Surface	1	1	14:45	15:00	25.4	6.68	25.8	5.99	4.96	11.1
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR10a	Surface	1	2	14:45	15:00	25.4	6.72	25.9	5.96	6.23	11.1
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR10a	Middle	2	1	14:45	15:00	25.4	6.71	26.1	5.98	4.62	9.8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR10a	Middle	2	2	14:45	15:00	25.4	6.75	26.1	6.03	4.93	9.8
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR10a	Bottom	3	1	14:45	15:00	25.3	6.83	26.1	5.9	5.06	14
TM-CLK Northern	HY/2012/08	2013-11-04	Mid-Ebb	SR10a	Bottom	3	2	14:45	15:00	25.3	6.85	26.2	5.88	4.94	13.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS4	Surface	1	1	10:52	11:06	25.6	8.39	25.4	6.79	9.98	6.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS4	Surface	1	2	10:52	11:06	25.5	8.43	25.5	6.83	10.2	5.5
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS4	Middle	2	1	10:52	11:06	25.4	8.41	25.5	6.773	10.7	7.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS4	Middle	2	2	10:52	11:06	25.5	8.45	25.6	6.71	10.5	9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS4	Bottom	3	1	10:52	11:06	25.4	8.51	25.7	6.64	10.9	7.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS4	Bottom	3	2	10:52	11:06	25.4	8.48	25.6	6.6	11.1	8.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS6	Surface	1	1	07:36	07:51	25.4	7.61	25.6	6.52	14.6	13.5
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS6	Surface	1	2	07:36	07:51	25.5	7.55	25.7	6.46	14.9	15.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS6	Middle	2	1	07:36	07:51	25.4	7.44	25.8	6.4	15.1	15.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS6	Middle	2	2	07:36	07:51	25.4	7.49	25.7	6.42	15.5	17.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS6	Bottom	3	1	07:36	07:51	25.4	7.21	25.9	6.32	15.5	21.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	CS6	Bottom	3	2	07:36	07:51	25.3	7.25	25.9	6.34	15.7	22.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS12	Surface	1	1	10:15	10:27	25.4	8.38	26.6	6.6	8.99	8.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS12	Surface	1	2	10:15	10:27	25.4	8.41	25.7	6.63	9.05	8.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS12	Middle	2	1	10:15	10:27	25.4	8.46	25.7	6.66	9.11	8.5
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS12	Middle	2	2	10:15	10:27	25.3	8.49	25.7	6.64	9.17	7.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS12	Bottom	3	1	10:15	10:27	25.3	8.5	25.8	6.54	9.28	10.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS12	Bottom	3	2	10:15	10:27	25.2	8.52	25.8	6.56	9.33	9.4

TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS13	Surface	1	1	09:52	10:07	25.4	7.99	25.6	6.49	9.91	8.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS13	Surface	1	2	09:52	10:07	25.5	8.04	25.5	6.51	9.89	8.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS13	Middle	2	1	09:52	10:07	25.4	8.11	25.6	6.44	9.95	10.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS13	Middle	2	2	09:52	10:07	25.3	8.16	25.7	6.39	9.99	9.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS13	Bottom	3	1	09:52	10:07	25.3	8.19	25.8	6.3	10.6	12.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS13	Bottom	3	2	09:52	10:07	25.3	8.25	25.8	6.28	10.8	14.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS14	Surface	1	1	10:34	10:46	25.5	8.38	25.6	6.37	9.63	5.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS14	Surface	1	2	10:34	10:46	25.4	8.44	25.5	6.41	8.82	7.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS14	Middle	2	1	10:34	10:46	25.4	8.46	25.7	6.45	9.06	4.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS14	Middle	2	2	10:34	10:46	25.4	8.45	25.6	6.42	9.15	4.5
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS14	Bottom	3	1	10:34	10:46	25.4	8.39	25.7	6.4	8.29	10.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS14	Bottom	3	2	10:34	10:46	25.3	8.36	25.8	6.43	8.22	8.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS15	Surface	1	1	09:25	09:40	25.4	8.19	25.6	6.68	12.1	10.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS15	Surface	1	2	09:25	09:40	25.4	8.23	25.5	6.65	12.4	11.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS15	Middle	2	1	09:25	09:40	25.4	8.3	25.6	6.61	12.9	11.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS15	Middle	2	2	09:25	09:40	25.3	8.28	25.5	6.63	13.1	12.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS15	Bottom	3	1	09:25	09:40	25.2	8.33	25.6	6.51	13.5	11.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	IS15	Bottom	3	2	09:25	09:40	25.3	8.32	25.7	6.53	13.2	11.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR8	Surface	1	1	08:33	08:48	25.5	7.72	25.6	6.54	14.4	12
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR8	Surface	1	2	08:33	08:48	25.4	7.75	25.7	6.5	14.6	10
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR8	Middle	2	1	08:33	08:48						
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR8	Middle	2	2	08:33	08:48						
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR8	Bottom	3	1	08:33	08:48	25.3	7.65	25.8	6.63	15.8	14.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR8	Bottom	3	2	08:33	08:48	25.4	7.68	25.8	6.66	16.3	14.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR9	Surface	1	1	08:58	09:12	25.4	8.31	25.5	6.86	11.2	11.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR9	Surface	1	2	08:58	09:12	25.3	8.26	25.6	6.81	10.9	11.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR9	Middle	2	1	08:58	09:12						
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR9	Middle	2	2	08:58	09:12						
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR9	Bottom	3	1	08:58	09:12	25.3	8.4	25.8	6.54	11.8	12.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR9	Bottom	3	2	08:58	09:12	25.2	8.37	25.7	6.49	11.7	12.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR10a	Surface	1	1	08:06	08:21	25.4	6.62	25.7	6.17	13.3	16.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR10a	Surface	1	2	08:06	08:21	25.3	6.66	25.8	6.14	13.8	15.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR10a	Middle	2	1	08:06	08:21	25.4	6.71	25.9	6.16	14.2	18
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR10a	Middle	2	2	08:06	08:21	25.4	6.69	25.8	6.21	14.5	17.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR10a	Bottom	3	1	08:06	08:21	25.3	6.88	26	6.04	14.9	21.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Flood	SR10a	Bottom	3	2	08:06	08:21	25.3	6.81	26.1	6.02	15.2	23.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS4	Surface	1	1	13:09	13:23	25.7	8.31	25.5	6.73	10.4	8.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS4	Surface	1	2	13:09	13:23	25.6	8.38	25.6	6.77	10.8	7.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS4	Middle	2	1	13:09	13:23	25.5	8.37	25.6	6.72	11.2	10.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS4	Middle	2	2	13:09	13:23	25.5	8.41	25.5	6.66	10.9	9.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS4	Bottom	3	1	13:09	13:23	25.3	8.45	25.7	6.59	11.4	8.3

TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS4	Bottom	3	2	13:09	13:23	25.4	8.46	25.7	6.54	11.6	10
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS6	Surface	1	1	16:17	16:39	25.6	7.64	25.6	6.46	14.8	17
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS6	Surface	1	2	16:17	16:39	25.6	7.58	25.7	6.4	15.1	17.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS6	Middle	2	1	16:17	16:39	25.5	7.46	25.7	6.35	15.4	18.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS6	Middle	2	2	16:17	16:39	25.6	7.51	25.8	6.36	15.9	20.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS6	Bottom	3	1	16:17	16:39	25.3	7.24	25.9	6.28	16.1	21.5
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	CS6	Bottom	3	2	16:17	16:39	25.3	7.28	25.8	6.3	16.4	20.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS12	Surface	1	1	13:52	14:06	25.5	8.34	25.7	6.55	9.06	8.5
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS12	Surface	1	2	13:52	14:06	25.5	8.39	25.6	6.58	9.12	6.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS12	Middle	2	1	13:52	14:06	25.4	8.42	25.8	6.61	9.19	8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS12	Middle	2	2	13:52	14:06	25.3	8.4	25.8	6.59	9.23	9.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS12	Bottom	3	1	13:52	14:06	25.3	8.51	25.8	6.49	9.33	8.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS12	Bottom	3	2	13:52	14:06	25.3	8.54	25.9	6.51	9.36	8.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS13	Surface	1	1	14:14	14:29	25.6	8.01	25.7	6.44	9.98	12.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS13	Surface	1	2	14:14	14:29	25.5	8.07	25.7	6.46	9.93	12.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS13	Middle	2	1	14:14	14:29	25.5	8.15	25.7	6.39	10.5	11.5
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS13	Middle	2	2	14:14	14:29	25.4	8.19	25.8	6.33	10.1	11.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS13	Bottom	3	1	14:14	14:29	25.3	8.21	25.9	6.28	10.9	17.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS13	Bottom	3	2	14:14	14:29	25.2	8.23	25.8	6.31	11.3	19.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS14	Surface	1	1	13:31	13:45	25.5	8.25	25.7	6.31	9.58	9.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS14	Surface	1	2	13:31	13:45	25.6	8.31	25.6	6.35	8.69	8.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS14	Middle	2	1	13:31	13:45	25.5	8.41	25.7	6.39	9.01	7.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS14	Middle	2	2	13:31	13:45	25.4	8.37	25.7	6.36	9.09	7.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS14	Bottom	3	1	13:31	13:45	25.4	8.31	25.9	6.34	8.33	7.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS14	Bottom	3	2	13:31	13:45	25.4	8.37	25.8	6.37	8.31	8.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS15	Surface	1	1	14:44	14:59	25.5	8.21	25.6	6.62	12.5	14.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS15	Surface	1	2	14:44	14:59	25.5	8.25	25.6	6.59	12.2	13
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS15	Middle	2	1	14:44	14:59	25.3	8.35	25.7	6.55	13.2	15.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS15	Middle	2	2	14:44	14:59	25.4	8.31	25.6	6.57	13.3	14.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS15	Bottom	3	1	14:44	14:59	25.4	8.37	25.8	6.49	13.6	14.3
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	IS15	Bottom	3	2	14:44	14:59	25.4	8.39	25.8	6.43	13.9	14.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR8	Surface	1	1	15:30	15:45	25.6	7.76	25.7	6.48	14.7	12
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR8	Surface	1	2	15:30	15:45	25.5	7.79	25.8	6.44	15	10.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR8	Middle	2	1	15:30	15:45						
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR8	Middle	2	2	15:30	15:45						
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR8	Bottom	3	1	15:30	15:45	25.5	7.68	25.9	6.57	15.9	14.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR8	Bottom	3	2	15:30	15:45	25.5	7.72	25.8	6.6	16.1	14.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR9	Surface	1	1	15:07	15:22	25.4	8.33	25.6	6.81	11.7	11.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR9	Surface	1	2	15:07	15:22	25.5	8.28	25.7	6.77	11.1	12.1
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR9	Middle	2	1	15:07	15:22						
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR9	Middle	2	2	15:07	15:22						

TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR9	Bottom	3	1	15:07	15:22	25.4	8.44	25.9	6.51	12.1	11.6
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR9	Bottom	3	2	15:07	15:22	25.3	8.46	25.9	6.45	11.9	13.2
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR10a	Surface	1	1	15:53	16:02	25.5	6.6	25.7	6.12	13.5	17.8
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR10a	Surface	1	2	15:53	16:02	25.4	6.63	25.7	6.09	13.9	17.5
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR10a	Middle	2	1	15:53	16:02	25.4	6.69	25.7	6.11	14.4	18.7
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR10a	Middle	2	2	15:53	16:02	25.5	6.73	25.8	6.15	14.6	17.4
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR10a	Bottom	3	1	15:53	16:02	25.3	6.85	25.9	5.98	15.4	17.9
TM-CLK Northern	HY/2012/08	2013-11-06	Mid-Ebb	SR10a	Bottom	3	2	15:53	16:02	25.2	6.8	26	5.89	15.8	19.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS4	Surface	1	1	12:34	13:02	25.3	7.83	25.3	6.04	8.96	9.3
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS4	Surface	1	2	12:34	13:02	25.3	7.84	25.3	6.07	8.94	7.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS4	Middle	2	1	12:34	13:02	25.3	7.85	25.5	5.9	8.17	9.8
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS4	Middle	2	2	12:34	13:02	25.3	7.84	25.5	5.94	8.19	9.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS4	Bottom	3	1	12:34	13:02	25.3	7.86	25.5	5.98	8.27	10.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS4	Bottom	3	2	12:34	13:02	25.2	7.86	25.4	5.95	8.25	9.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS6	Surface	1	1	09:32	09:47	25.1	7.64	25.5	6.04	4.85	6.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS6	Surface	1	2	09:32	09:47	25.1	7.62	25.5	6.07	4.89	7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS6	Middle	2	1	09:32	09:47	25.1	7.67	25.7	5.96	5.75	7.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS6	Middle	2	2	09:32	09:47	25.1	7.69	25.6	5.99	5.78	6.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS6	Bottom	3	1	09:32	09:47	25.1	7.62	25.7	5.95	5.88	8.2
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	CS6	Bottom	3	2	09:32	09:47	25.1	7.65	25.6	5.92	5.86	8.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS12	Surface	1	1	11:45	12:00	25.4	7.84	25.3	6.03	4.69	5.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS12	Surface	1	2	11:45	12:00	25.4	7.84	25.3	6.06	4.67	5.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS12	Middle	2	1	11:45	12:00	25.2	7.86	25.5	5.93	5.23	6.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS12	Middle	2	2	11:45	12:00	25.2	7.86	25.5	5.96	5.27	6.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS12	Bottom	3	1	11:45	12:00	25.2	7.89	25.6	5.98	5.6	6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS12	Bottom	3	2	11:45	12:00	25.2	7.88	25.6	5.95	5.64	8.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS13	Surface	1	1	11:27	11:41	25.3	7.88	25.7	6.01	4.66	4.8
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS13	Surface	1	2	11:27	11:41	25.3	7.89	25.7	6.04	4.62	4.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS13	Middle	2	1	11:27	11:41	25.2	7.87	25.7	5.82	5.31	11.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS13	Middle	2	2	11:27	11:41	25.1	7.88	25.6	5.78	5.34	10.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS13	Bottom	3	1	11:27	11:41	25.2	7.8	25.7	5.8	7.19	11.8
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS13	Bottom	3	2	11:27	11:41	25.2	7.81	25.7	5.84	7.21	12.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS14	Surface	1	1	12:10	12:24	25.4	7.89	25.3	6.02	4.97	6.2
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS14	Surface	1	2	12:10	12:24	25.4	7.89	25.3	6.06	4.93	4.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS14	Middle	2	1	12:10	12:24	25.2	7.87	25.5	5.97	5.84	6.2
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS14	Middle	2	2	12:10	12:24	25.2	7.87	25.5	5.94	5.86	7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS14	Bottom	3	1	12:10	12:24	25.2	7.85	25.5	5.92	6.82	7.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS14	Bottom	3	2	12:10	12:24	25.2	7.86	25.4	5.96	6.84	7.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS15	Surface	1	1	11:09	11:22	25.3	7.8	25.7	6.19	4.49	6.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS15	Surface	1	2	11:09	11:22	25.3	7.82	25.7	6.15	4.45	5.4
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS15	Middle	2	1	11:09	11:22	25.3	7.81	25.7	5.98	6.23	10.2

TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS15	Middle	2	2	11:09	11:22	25.2	7.81	25.7	5.95	6.25	11
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS15	Bottom	3	1	11:09	11:22	25.2	7.84	25.7	5.84	7.02	9.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	IS15	Bottom	3	2	11:09	11:22	25.2	7.84	25.7	5.87	7.06	11
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR8	Surface	1	1	10:30	10:42	25.4	7.79	25.6	5.93	4.31	6.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR8	Surface	1	2	10:30	10:42	25.4	7.82	25.6	5.95	4.27	5.2
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR8	Middle	2	1	10:30	10:42						
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR8	Middle	2	2	10:30	10:42						
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR8	Bottom	3	1	10:30	10:42	25.1	7.8	25.7	5.91	6.92	9.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR8	Bottom	3	2	10:30	10:42	25.1	7.81	25.7	5.87	6.9	9.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR9	Surface	1	1	10:48	11:03	25.3	7.85	25.7	6.06	4.47	8.4
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR9	Surface	1	2	10:48	11:03	25.2	7.85	25.7	6.02	4.42	7.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR9	Middle	2	1	10:48	11:03						
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR9	Middle	2	2	10:48	11:03						
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR9	Bottom	3	1	10:48	11:03	25.2	7.89	25.7	5.98	6.53	7.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR9	Bottom	3	2	10:48	11:03	25.2	7.87	25.7	5.94	6.58	7.8
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR10a	Surface	1	1	10:02	10:17	25.1	7.7	26	5.88	8.87	13.2
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR10a	Surface	1	2	10:02	10:17	25.1	7.72	26	5.85	8.85	12.4
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR10a	Middle	2	1	10:02	10:17	25.1	7.74	26	5.79	6.81	13.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR10a	Middle	2	2	10:02	10:17	25.1	7.74	26	5.76	6.84	13.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR10a	Bottom	3	1	10:02	10:17	25.1	7.75	26	5.88	7.22	14.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Flood	SR10a	Bottom	3	2	10:02	10:17	25.1	7.75	25.9	5.84	7.26	15.3
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS4	Surface	1	1	14:52	15:12	25.5	7.78	25.4	6	10.1	10
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS4	Surface	1	2	14:52	15:12	25.3	7.8	25.4	6.02	10.3	10.4
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS4	Middle	2	1	14:52	15:12	25.4	7.82	25.6	5.88	9.12	7.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS4	Middle	2	2	14:52	15:12	25.4	7.78	25.6	5.9	9.14	7.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS4	Bottom	3	1	14:52	15:12	25.3	7.82	25.6	5.86	9.06	11.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS4	Bottom	3	2	14:52	15:12	25.3	7.8	25.6	5.88	9.08	10.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS6	Surface	1	1	17:20	17:39	25.3	7.64	25.4	6.06	5.38	6.2
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS6	Surface	1	2	17:20	17:39	25.1	7.66	25.4	6.04	5.36	6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS6	Middle	2	1	17:20	17:39	25	7.66	25.8	5.94	5.64	5.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS6	Middle	2	2	17:20	17:39	25.2	7.66	25.6	5.92	5.66	6.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS6	Bottom	3	1	17:20	17:39	25.2	7.64	25.8	5.92	6.56	7.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	CS6	Bottom	3	2	17:20	17:39	25	7.66	25.8	5.9	6.52	9.3
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS12	Surface	1	1	15:40	15:54	25.6	7.74	25.4	6	4.79	5.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS12	Surface	1	2	15:40	15:54	25.4	7.76	25.4	5.98	4.77	5.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS12	Middle	2	1	15:40	15:54	25.4	7.78	25.6	5.94	4.67	7.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS12	Middle	2	2	15:40	15:54	25.4	7.76	25.4	5.9	4.71	6.2
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS12	Bottom	3	1	15:40	15:54	25.4	7.8	25.6	5.86	6.83	6.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS12	Bottom	3	2	15:40	15:54	25.2	7.78	25.4	5.84	6.85	5.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS13	Surface	1	1	15:58	16:13	25.4	7.72	25.4	6.04	5.22	6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS13	Surface	1	2	15:58	16:13	25.6	7.7	25.6	6	5.26	6.8

TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS13	Middle	2	1	15:58	16:13	25.4	7.76	25.6	5.9	6.69	6.8
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS13	Middle	2	2	15:58	16:13	25.4	7.8	25.6	5.86	6.68	6.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS13	Bottom	3	1	15:58	16:13	25.4	7.8	25.6	5.84	7.79	11.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS13	Bottom	3	2	15:58	16:13	25.3	7.76	25.8	5.8	7.77	11.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS14	Surface	1	1	15:22	15:36	25.5	7.76	25.4	5.98	5.24	4.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS14	Surface	1	2	15:22	15:36	25.7	7.74	25.4	5.96	5.28	5.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS14	Middle	2	1	15:22	15:36	25.5	7.76	25.6	5.94	6.57	6.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS14	Middle	2	2	15:22	15:36	25.3	7.78	25.4	5.92	6.55	5.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS14	Bottom	3	1	15:22	15:36	25.4	7.82	25.6	5.94	4.88	7.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS14	Bottom	3	2	15:22	15:36	25.2	7.8	25.4	5.9	4.92	6.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS15	Surface	1	1	16:17	16:32	25.6	7.68	25.6	6.04	4.89	7.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS15	Surface	1	2	16:17	16:32	25.4	7.7	25.6	6.06	4.92	7.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS15	Middle	2	1	16:17	16:32	25.3	7.74	25.6	5.96	5.93	6.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS15	Middle	2	2	16:17	16:32	25.5	7.76	25.8	5.94	5.92	7.3
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS15	Bottom	3	1	16:17	16:32	25.3	7.76	25.7	5.92	6.99	10.5
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	IS15	Bottom	3	2	16:17	16:32	25.3	7.74	25.6	5.9	7.03	11.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR8	Surface	1	1	17:02	17:12	25.4	7.78	25.8	5.94	4.54	2.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR8	Surface	1	2	17:02	17:12	25.4	7.76	25.6	5.9	4.58	3.8
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR8	Middle	2	1	17:02	17:12						
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR8	Middle	2	2	17:02	17:12						
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR8	Bottom	3	1	17:02	17:12	25.4	7.8	25.8	5.9	7.78	10
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR8	Bottom	3	2	17:02	17:12	25.2	7.78	26	5.88	7.74	11.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR9	Surface	1	1	16:37	16:47	25.5	7.74	25.6	6	5.07	5.2
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR9	Surface	1	2	16:37	16:47	25.7	7.78	25.4	5.98	5.03	6.6
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR9	Middle	2	1	16:37	16:47						
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR9	Middle	2	2	16:37	16:47						
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR9	Bottom	3	1	16:37	16:47	25.4	7.72	25.8	5.96	8.21	7.9
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR9	Bottom	3	2	16:37	16:47	25.6	7.74	25.8	5.94	8.26	8.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR10a	Surface	1	1	17:59	18:22	25.2	7.68	25.8	5.84	5.25	10.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR10a	Surface	1	2	17:59	18:22	25.4	7.7	25.6	5.86	5.29	10.4
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR10a	Middle	2	1	17:59	18:22	25.2	7.72	25.8	5.78	9	13.8
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR10a	Middle	2	2	17:59	18:22	25.2	7.72	26	5.76	9.04	14.7
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR10a	Bottom	3	1	17:59	18:22	25.2	7.74	26.2	5.76	10.1	17.1
TM-CLK Northern	HY/2012/08	2013-11-08	Mid-Ebb	SR10a	Bottom	3	2	17:59	18:22	25	7.74	26.2	5.8	10.4	15.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS4	Surface	1	1	16:07	16:34	25.3	7.87	25.2	6.36	5.94	5.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS4	Surface	1	2	16:07	16:34	25.3	7.88	25.2	6.33	5.98	4.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS4	Middle	2	1	16:07	16:34	25.2	7.86	25.3	6.03	6.47	5.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS4	Middle	2	2	16:07	16:34	25.2	7.86	25.2	6.07	6.42	4.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS4	Bottom	3	1	16:07	16:34	25.2	7.85	25.3	6.17	6.28	5.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS4	Bottom	3	2	16:07	16:34	25.2	7.86	25.3	6.14	6.35	4.2
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS6	Surface	1	1	12:54	13:09	25.3	7.69	25.2	6.33	4.61	5.1

TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS6	Surface	1	2	12:54	13:09	25.3	7.67	25.2	6.31	4.65	4.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS6	Middle	2	1	12:54	13:09	25.3	7.7	25.3	6.36	5.36	4.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS6	Middle	2	2	12:54	13:09	25.3	7.69	25.2	6.32	5.32	4.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS6	Bottom	3	1	12:54	13:09	25.2	7.72	25.3	6.28	5.01	4.7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	CS6	Bottom	3	2	12:54	13:09	25.2	7.71	25.3	6.3	5.08	4.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS12	Surface	1	1	15:17	15:32	25.2	7.82	25.3	6.09	5.94	5.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS12	Surface	1	2	15:17	15:32	25.2	7.82	25.3	6.05	5.91	7.2
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS12	Middle	2	1	15:17	15:32	25.2	7.85	25.3	6.08	5.78	4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS12	Middle	2	2	15:17	15:32	25.2	7.84	25.3	6.04	5.77	4.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS12	Bottom	3	1	15:17	15:32	25.2	7.88	25.3	6.16	5.01	4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS12	Bottom	3	2	15:17	15:32	25.2	7.87	25.3	6.14	5.08	4.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS13	Surface	1	1	14:56	15:10	25.3	7.86	25.3	6.23	8.57	10.3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS13	Surface	1	2	14:56	15:10	25.3	7.85	25.3	6.27	8.52	10.2
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS13	Middle	2	1	14:56	15:10	25.2	7.85	25.3	6.25	12.8	9.7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS13	Middle	2	2	14:56	15:10	25.2	7.85	25.3	6.21	12.7	9.3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS13	Bottom	3	1	14:56	15:10	25.2	7.83	25.3	6.19	10.3	8.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS13	Bottom	3	2	14:56	15:10	25.2	7.82	25.3	6.16	10.2	8.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS14	Surface	1	1	15:40	15:55	25.2	7.84	25.3	6.27	5.28	4.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS14	Surface	1	2	15:40	15:55	25.2	7.84	25.3	6.29	5.33	3.3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS14	Middle	2	1	15:40	15:55	25.2	7.85	25.3	6.1	5.01	6.3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS14	Middle	2	2	15:40	15:55	25.2	7.85	25.3	6.07	5.09	5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS14	Bottom	3	1	15:40	15:55	25.2	7.81	25.3	6.09	5.69	5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS14	Bottom	3	2	15:40	15:55	25.2	7.82	25.2	6.05	5.74	4.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS15	Surface	1	1	14:35	14:50	25.2	7.84	25.3	6.2	6.8	3.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS15	Surface	1	2	14:35	14:50	25.2	7.84	25.3	6.23	6.85	2.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS15	Middle	2	1	14:35	14:50	25.2	7.86	25.3	6.22	5.62	3.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS15	Middle	2	2	14:35	14:50	25.2	7.86	25.3	6.19	5.68	3.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS15	Bottom	3	1	14:35	14:50	25.2	7.85	25.3	6.21	6.04	4.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	IS15	Bottom	3	2	14:35	14:50	25.1	7.84	25.3	6.19	6.08	5.2
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR8	Surface	1	1	13:54	14:07	25.2	7.81	25.3	6.32	7.2	4.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR8	Surface	1	2	13:54	14:07	25.2	7.82	25.3	6.34	7.25	4.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR8	Middle	2	1	13:54	14:07						
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR8	Middle	2	2	13:54	14:07						
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR8	Bottom	3	1	13:54	14:07	25.2	7.8	25.3	6.28	11	11
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR8	Bottom	3	2	13:54	14:07	25.2	7.81	25.3	6.24	11	9.2
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR9	Surface	1	1	14:15	14:29	25.2	7.81	25.4	6.09	6.85	5.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR9	Surface	1	2	14:15	14:29	25.2	7.8	25.4	6.06	6.81	6.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR9	Middle	2	1	14:15	14:29						
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR9	Middle	2	2	14:15	14:29						
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR9	Bottom	3	1	14:15	14:29	25.2	7.82	25.3	6.1	6.77	4.7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR9	Bottom	3	2	14:15	14:29	25.1	7.82	25.2	6.07	6.72	6.3

TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR10a	Surface	1	1	13:24	13:39	25.6	7.74	24.9	6.4	5.61	4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR10a	Surface	1	2	13:24	13:39	25.6	7.74	24.9	6.44	5.65	3.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR10a	Middle	2	1	13:24	13:39	25.3	7.76	25	6.36	5.36	3.3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR10a	Middle	2	2	13:24	13:39	25.3	7.78	25.1	6.34	5.32	3.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR10a	Bottom	3	1	13:24	13:39	25.3	7.84	25.2	6.3	5.06	4.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Flood	SR10a	Bottom	3	2	13:24	13:39	25.3	7.84	25.2	6.27	5.01	3.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS4	Surface	1	1	19:01	19:16	24.9	7.84	25	6.12	5.48	5.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS4	Surface	1	2	19:01	19:16	24.9	7.84	25	6	5.6	3.7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS4	Middle	2	1	19:01	19:16	25	7.83	25.1	5.97	5.79	6.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS4	Middle	2	2	19:01	19:16	25	7.83	25.1	5.9	5.93	6.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS4	Bottom	3	1	19:01	19:16	25.1	7.83	25.1	5.84	6.8	7.7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS4	Bottom	3	2	19:01	19:16	25.1	7.83	25.2	5.8	7.04	7.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS6	Surface	1	1	21:46	22:01	25	7.83	25.2	6.14	5.14	4.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS6	Surface	1	2	21:46	22:01	25	7.82	25.2	6.1	5.07	3.7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS6	Middle	2	1	21:46	22:01	25.1	7.84	25.3	6.04	4.74	5.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS6	Middle	2	2	21:46	22:01	25.1	7.84	25.3	6	4.79	4.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS6	Bottom	3	1	21:46	22:01	25.1	7.83	25.4	5.88	5.1	5.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	CS6	Bottom	3	2	21:46	22:01	25.1	7.84	25.4	5.94	4.99	4.2
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS12	Surface	1	1	19:51	20:06	25	7.83	25	5.97	5.01	4.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS12	Surface	1	2	19:51	20:06	24.9	7.83	25.1	5.92	4.96	3.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS12	Middle	2	1	19:51	20:06	25.1	7.82	25.1	5.9	5.79	4.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS12	Middle	2	2	19:51	20:06	25.1	7.82	25.2	5.84	5.63	4.3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS12	Bottom	3	1	19:51	20:06	25	7.81	25.2	5.88	5.72	3.3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS12	Bottom	3	2	19:51	20:06	25	7.81	25.2	5.92	5.66	4.7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS13	Surface	1	1	20:16	20:31	25	7.83	25.1	6	8.28	9.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS13	Surface	1	2	20:16	20:31	25	7.83	25.2	6.04	8.48	9.4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS13	Middle	2	1	20:16	20:31	24.9	7.82	25.1	5.97	12.3	8.7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS13	Middle	2	2	20:16	20:31	25	7.82	25.1	5.9	12	10.3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS13	Bottom	3	1	20:16	20:31	24.9	7.82	25.1	5.94	9.05	8.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS13	Bottom	3	2	20:16	20:31	24.9	7.82	25	5.9	8.96	9.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS14	Surface	1	1	19:26	19:41	24.9	7.84	25.1	6.03	5.37	3.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS14	Surface	1	2	19:26	19:41	24.9	7.85	25.1	6.1	5.42	3.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS14	Middle	2	1	19:26	19:41	25	7.84	25.1	6	5.96	5.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS14	Middle	2	2	19:26	19:41	25	7.84	25.2	5.96	5.88	5.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS14	Bottom	3	1	19:26	19:41	25.1	7.83	25.2	6.1	6.1	4.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS14	Bottom	3	2	19:26	19:41	25.1	7.83	25.2	6	6.22	4.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS15	Surface	1	1	20:41	20:56	25	7.83	25.1	6.08	5.68	4.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS15	Surface	1	2	20:41	20:56	25	7.82	25.1	6.12	5.53	5.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS15	Middle	2	1	20:41	20:56	24.9	7.82	25.2	6.02	5.8	3.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS15	Middle	2	2	20:41	20:56	24.9	7.82	25.2	6.08	5.74	3.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS15	Bottom	3	1	20:41	20:56	24.8	7.82	25.3	5.98	6.3	6.2

TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	IS15	Bottom	3	2	20:41	20:56	24.8	7.82	25.3	5.94	6.41	5.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR8	Surface	1	1	21:26	21:36	25.1	7.83	25	6.14	5.99	6.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR8	Surface	1	2	21:26	21:36	25.1	7.83	25	6.2	5.93	6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR8	Middle	2	1	21:26	21:36						
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR8	Middle	2	2	21:26	21:36						
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR8	Bottom	3	1	21:26	21:36	25.1	7.82	25.2	6.1	12.8	13.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR8	Bottom	3	2	21:26	21:36	25.1	7.82	25.2	6.08	13.6	14.8
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR9	Surface	1	1	21:06	21:16	25	7.82	25.2	6.12	5.82	6.5
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR9	Surface	1	2	21:06	21:16	25	7.83	25.2	6.14	5.68	7
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR9	Middle	2	1	21:06	21:16						
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR9	Middle	2	2	21:06	21:16						
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR9	Bottom	3	1	21:06	21:16	25	7.82	25.3	6.08	5.99	6.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR9	Bottom	3	2	21:06	21:16	25	7.82	25.4	6.04	6.13	7.1
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR10a	Surface	1	1	22:16	22:31	25.1	7.83	25.1	6.08	4.92	3.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR10a	Surface	1	2	22:16	22:31	25.1	7.83	25.1	6.16	4.88	4
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR10a	Middle	2	1	22:16	22:31	25.2	7.82	25.2	6.06	4.74	3
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR10a	Middle	2	2	22:16	22:31	25.2	7.82	25.2	6	4.6	3.9
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR10a	Bottom	3	1	22:16	22:31	25.1	7.82	25.3	5.97	4.49	3.6
TM-CLK Northern	HY/2012/08	2013-11-11	Mid-Ebb	SR10a	Bottom	3	2	22:16	22:31	25.2	7.82	25.2	5.9	4.55	5.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS4	Surface	1	1	17:35	17:53	24.7	7.93	25	5.96	4.15	2.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS4	Surface	1	2	17:35	17:53	24.8	7.94	25	6	4.19	3.8
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS4	Middle	2	1	17:35	17:53	24.7	7.98	25.1	5.82	3.55	4.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS4	Middle	2	2	17:35	17:53	24.6	7.97	25	5.88	3.54	3.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS4	Bottom	3	1	17:35	17:53	24.6	7.98	25.1	5.97	4.7	4.7
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS4	Bottom	3	2	17:35	17:53	24.6	7.99	25.1	5.95	4.79	5.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS6	Surface	1	1	14:23	14:43	24.8	7.79	25	6.29	3.82	4.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS6	Surface	1	2	14:23	14:43	24.8	7.79	25	6.21	3.88	4.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS6	Middle	2	1	14:23	14:43	24.7	7.82	25.1	6.15	3.62	3.4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS6	Middle	2	2	14:23	14:43	24.7	7.81	25	6.18	3.6	3.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS6	Bottom	3	1	14:23	14:43	24.7	7.87	25.1	6.06	3.47	4.8
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	CS6	Bottom	3	2	14:23	14:43	24.6	7.88	25.1	6.04	3.49	5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS12	Surface	1	1	16:53	17:11	24.7	7.89	24.9	6.09	3.68	3.8
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS12	Surface	1	2	16:53	17:11	24.7	7.88	24.9	6.01	3.7	2.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS12	Middle	2	1	16:53	17:11	24.7	7.99	25	6.13	3.47	3.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS12	Middle	2	2	16:53	17:11	24.6	8	25	6.17	3.51	3.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS12	Bottom	3	1	16:53	17:11	24.6	8.01	25.1	6.08	3.96	3.7
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS12	Bottom	3	2	16:53	17:11	24.6	8.01	25.1	6.09	3.9	4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS13	Surface	1	1	16:29	16:48	24.8	7.74	25	6.06	3.4	5.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS13	Surface	1	2	16:29	16:48	24.8	7.74	25	6.07	3.35	6.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS13	Middle	2	1	16:29	16:48	24.7	7.81	25	5.94	3.27	4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS13	Middle	2	2	16:29	16:48	24.8	7.8	25	5.9	3.23	6.3

TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS13	Bottom	3	1	16:29	16:48	24.7	7.88	25	5.98	3.6	4.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS13	Bottom	3	2	16:29	16:48	24.7	7.89	25	5.99	3.58	4.8
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS14	Surface	1	1	17:14	17:31	24.8	7.92	24.9	5.99	3.72	3.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS14	Surface	1	2	17:14	17:31	24.8	7.93	25	5.94	3.71	3.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS14	Middle	2	1	17:14	17:31	24.7	7.95	25.1	6.08	3.88	3.4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS14	Middle	2	2	17:14	17:31	24.7	7.96	25	6.1	3.82	3.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS14	Bottom	3	1	17:14	17:31	24.6	7.94	25.1	5.84	3.43	4.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS14	Bottom	3	2	17:14	17:31	24.7	7.95	25.1	5.88	3.47	6.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS15	Surface	1	1	16:05	16:24	24.8	7.78	25	6.12	3.91	5.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS15	Surface	1	2	16:05	16:24	24.7	7.79	24.9	6.1	3.93	6.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS15	Middle	2	1	16:05	16:24	24.7	7.8	25	6.02	3.54	5.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS15	Middle	2	2	16:05	16:24	24.7	7.8	25	6.04	3.56	5.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS15	Bottom	3	1	16:05	16:24	24.6	7.82	25	6.1	4.11	6.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	IS15	Bottom	3	2	16:05	16:24	24.7	7.82	25	6.08	4.13	7.3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR8	Surface	1	1	15:17	15:35	24.9	7.75	25	6.24	3.28	5.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR8	Surface	1	2	15:17	15:35	24.9	7.76	25	6.25	3.3	4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR8	Middle	2	1	15:17	15:35						
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR8	Middle	2	2	15:17	15:35						
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR8	Bottom	3	1	15:17	15:35	24.7	7.81	25.1	6.11	3.4	4.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR8	Bottom	3	2	15:17	15:35	24.8	7.82	25.1	6.14	3.39	3.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR9	Surface	1	1	15:40	15:59	24.8	7.71	25	6.28	3.12	3.4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR9	Surface	1	2	15:40	15:59	24.7	7.7	25	6.3	3.15	4.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR9	Middle	2	1	15:40	15:59						
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR9	Middle	2	2	15:40	15:59						
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR9	Bottom	3	1	15:40	15:59	24.7	7.75	25.1	6.12	3.39	4.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR9	Bottom	3	2	15:40	15:59	24.6	7.76	25.1	6.1	3.31	4.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR10a	Surface	1	1	14:51	15:09	24.8	7.8	24.9	6.19	3.41	4.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR10a	Surface	1	2	14:51	15:09	24.9	7.8	24.9	6.2	3.47	4.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR10a	Middle	2	1	14:51	15:09	24.7	7.99	25	6.05	3.7	5.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR10a	Middle	2	2	14:51	15:09	24.8	7.99	25	6.04	3.76	4.3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR10a	Bottom	3	1	14:51	15:09	24.7	7.91	25.1	5.91	3.92	4.7
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Flood	SR10a	Bottom	3	2	14:51	15:09	24.7	7.91	25.1	5.93	3.9	3.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS4	Surface	1	1	07:42	08:06	24.8	7.91	24.9	6.03	3.58	4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS4	Surface	1	2	07:42	08:06	24.8	7.9	25	6.01	3.62	5.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS4	Middle	2	1	07:42	08:06	24.7	7.9	25	5.99	3.89	4.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS4	Middle	2	2	07:42	08:06	24.7	7.9	25	5.97	3.81	4.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS4	Bottom	3	1	07:42	08:06	24.7	7.97	25.1	5.85	3.94	5.3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS4	Bottom	3	2	07:42	08:06	24.7	7.96	25.1	5.86	3.96	4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS6	Surface	1	1	10:54	11:12	24.9	7.79	25	6.16	3.21	5.8
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS6	Surface	1	2	10:54	11:12	24.9	7.79	25	6.19	3.29	5.7
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS6	Middle	2	1	10:54	11:12	24.8	7.85	25	6.12	3.47	4.5

TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS6	Middle	2	2	10:54	11:12	24.7	7.85	25	6.1	3.49	4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS6	Bottom	3	1	10:54	11:12	24.7	7.88	25.1	6.02	3.67	4.7
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	CS6	Bottom	3	2	10:54	11:12	24.7	7.87	25.1	6.08	3.7	4.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS12	Surface	1	1	08:46	09:02	24.9	7.7	25	6.14	3.55	2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS12	Surface	1	2	08:46	09:02	24.8	7.7	24.9	6.16	3.58	3.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS12	Middle	2	1	08:46	09:02	24.7	7.84	25	6.2	3.72	3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS12	Middle	2	2	08:46	09:02	24.7	7.85	25	6.18	3.7	2.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS12	Bottom	3	1	08:46	09:02	24.7	7.81	25.1	6	3.46	3.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS12	Bottom	3	2	08:46	09:02	24.6	7.81	25.1	5.99	3.5	4.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS13	Surface	1	1	09:08	09:28	24.8	7.91	24.9	5.91	3.46	4.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS13	Surface	1	2	09:08	09:28	24.8	7.92	24.9	5.99	3.5	5.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS13	Middle	2	1	09:08	09:28	24.7	7.94	24.9	5.9	3.15	4.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS13	Middle	2	2	09:08	09:28	24.7	7.94	25	5.94	3.19	5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS13	Bottom	3	1	09:08	09:28	24.6	7.98	25	5.88	3.59	5.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS13	Bottom	3	2	09:08	09:28	24.6	7.99	25	5.9	3.61	4.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS14	Surface	1	1	08:14	08:38	24.8	7.74	24.9	6.06	3.46	2.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS14	Surface	1	2	08:14	08:38	24.8	7.75	24.9	6.02	3.5	4.2
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS14	Middle	2	1	08:14	08:38	24.8	7.8	25	6.14	3.16	3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS14	Middle	2	2	08:14	08:38	24.7	7.8	25	6.1	3.2	3.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS14	Bottom	3	1	08:14	08:38	24.7	7.85	25.1	6.01	3.52	3.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS14	Bottom	3	2	08:14	08:38	24.7	7.86	25.1	6.05	3.58	4.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS15	Surface	1	1	09:30	09:49	24.7	7.81	25	6.06	3.33	4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS15	Surface	1	2	09:30	09:49	24.8	7.83	25	6.04	3.31	5.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS15	Middle	2	1	09:30	09:49	24.7	7.9	25	5.88	3.87	5.1
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS15	Middle	2	2	09:30	09:49	24.7	7.91	25	5.82	3.9	7.3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS15	Bottom	3	1	09:30	09:49	24.7	7.93	25.1	5.93	4.3	6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	IS15	Bottom	3	2	09:30	09:49	24.6	7.94	25.1	5.97	4.38	6.4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR8	Surface	1	1	10:08	10:23	24.9	7.88	24.9	5.97	3.16	5.4
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR8	Surface	1	2	10:08	10:23	24.9	7.88	24.9	5.99	3.2	6.3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR8	Middle	2	1	10:08	10:23						
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR8	Middle	2	2	10:08	10:23						
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR8	Bottom	3	1	10:08	10:23	24.8	7.89	25	5.77	3.65	5.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR8	Bottom	3	2	10:08	10:23	24.8	7.9	25.1	5.8	3.68	4.7
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR9	Surface	1	1	09:52	10:05	24.8	7.78	25	6.19	3.2	4.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR9	Surface	1	2	09:52	10:05	24.8	7.79	24.9	6.11	3.28	6.3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR9	Middle	2	1	09:52	10:05						
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR9	Middle	2	2	09:52	10:05						
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR9	Bottom	3	1	09:52	10:05	24.7	7.88	25.1	6.09	3.23	6.3
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR9	Bottom	3	2	09:52	10:05	24.7	7.88	25	6.01	3.27	5.5
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR10a	Surface	1	1	10:28	10:48	24.9	7.82	24.9	6.03	3.66	7
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR10a	Surface	1	2	10:28	10:48	24.9	7.83	25	6.07	3.64	6.3

TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR10a	Middle	2	1	10:28	10:48	24.8	7.99	25	5.93	3.27	5.9
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR10a	Middle	2	2	10:28	10:48	24.8	7.98	25	5.97	3.21	5.6
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR10a	Bottom	3	1	10:28	10:48	24.8	7.91	25.1	5.9	3.45	5.8
TM-CLK Northern	HY/2012/08	2013-11-13	Mid-Ebb	SR10a	Bottom	3	2	10:28	10:48	24.7	7.92	25.1	5.87	3.41	5.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS4	Surface	1	1	18:37	18:59	24	6.96	25.6	6.91	5.68	5.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS4	Surface	1	2	18:37	18:59	23.9	6.99	25.7	6.94	5.43	5.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS4	Middle	2	1	18:37	18:59	24	7	25.9	6.83	5.77	5.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS4	Middle	2	2	18:37	18:59	24.1	7.02	25.8	6.8	66.2	4.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS4	Bottom	3	1	18:37	18:59	24.1	7.04	26.1	6.69	7.08	5.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS4	Bottom	3	2	18:37	18:59	24.2	7.03	26.1	6.66	7.71	5.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS6	Surface	1	1	15:29	15:45	24.1	6.87	26.2	6.58	7.2	8.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS6	Surface	1	2	15:29	15:45	24.2	6.85	26.1	6.55	7.79	7.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS6	Middle	2	1	15:29	15:45	24.1	6.84	26.2	6.6	8.01	7.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS6	Middle	2	2	15:29	15:45	24	6.86	26.3	6.62	8.23	8.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS6	Bottom	3	1	15:29	15:45	24.2	6.88	26.4	6.66	8.77	8.9
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	CS6	Bottom	3	2	15:29	15:45	24.2	6.89	26.3	6.64	8.38	8.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS12	Surface	1	1	17:49	18:07	24.2	6.93	26.1	6.65	8.28	5.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS12	Surface	1	2	17:49	18:07	24.3	6.9	26.2	6.63	7.53	5.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS12	Middle	2	1	17:49	18:07	24.1	6.87	26.2	6.69	8.25	7.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS12	Middle	2	2	17:49	18:07	24	6.88	26.2	6.7	7.33	6.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS12	Bottom	3	1	17:49	18:07	24	6.91	26.4	6.57	8.54	10.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS12	Bottom	3	2	17:49	18:07	24	6.94	26.3	6.54	8.79	9.1
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS13	Surface	1	1	17:22	17:41	24.1	6.9	26.1	6.66	7.08	7.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS13	Surface	1	2	17:22	17:41	24.2	6.91	26	6.69	7.41	7.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS13	Middle	2	1	17:22	17:41	24.2	6.92	26.1	6.73	7.64	8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS13	Middle	2	2	17:22	17:41	24.1	6.94	26.2	6.72	7.36	7.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS13	Bottom	3	1	17:22	17:41	24.3	6.95	26.2	6.79	8.35	9.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS13	Bottom	3	2	17:22	17:41	24.2	6.93	26.2	6.77	8.09	10.9
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS14	Surface	1	1	18:12	18:30	24.1	6.89	26.1	6.6	8.67	8.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS14	Surface	1	2	18:12	18:30	24.1	6.88	26.2	6.62	8.21	7.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS14	Middle	2	1	18:12	18:30	24.2	6.9	26.3	6.66	8.89	6.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS14	Middle	2	2	18:12	18:30	24.1	6.92	26.2	6.68	8.322	7.6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS14	Bottom	3	1	18:12	18:30	24.2	6.93	26.3	6.5	9.4	7.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS14	Bottom	3	2	18:12	18:30	24.3	6.92	26.2	6.49	8.71	7.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS15	Surface	1	1	17:00	17:17	24	6.93	26.1	6.62	7.27	6.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS15	Surface	1	2	17:00	17:17	24.1	6.91	26.2	6.64	7.32	6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS15	Middle	2	1	17:00	17:17	24.2	6.89	26.2	6.67	8.02	7.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS15	Middle	2	2	17:00	17:17	24.2	6.88	26.1	6.68	8.35	7.2
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS15	Bottom	3	1	17:00	17:17	24.3	6.92	26.2	6.72	7.86	7.6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	IS15	Bottom	3	2	17:00	17:17	24.2	6.93	26.3	6.73	7.17	8.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR8	Surface	1	1	16:19	16:33	24.1	6.74	26.1	6.79	8.3	6.9

TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR8	Surface	1	2	16:19	16:33	24	6.75	26.2	6.8	8.08	7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR8	Middle	2	1	16:19	16:33						
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR8	Middle	2	2	16:19	16:33						
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR8	Bottom	3	1	16:19	16:33	24.1	6.77	26.2	6.73	9.67	9.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR8	Bottom	3	2	16:19	16:33	24.1	6.78	26.3	6.75	8.83	8.9
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR9	Surface	1	1	16:41	16:56	24	6.77	26.1	6.88	7.89	8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR9	Surface	1	2	16:41	16:56	24.1	6.8	26	6.85	7.91	7.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR9	Middle	2	1	16:41	16:56						
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR9	Middle	2	2	16:41	16:56						
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR9	Bottom	3	1	16:41	16:56	24.1	6.81	26.1	6.79	7.23	7.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR9	Bottom	3	2	16:41	16:56	24.2	6.82	26.1	6.81	6.93	7.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR10a	Surface	1	1	15:57	16:13	24.2	6.9	26.3	6.62	7.45	4.6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR10a	Surface	1	2	15:57	16:13	24.1	6.89	26.2	6.59	7.69	5.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR10a	Middle	2	1	15:57	16:13	24.1	6.91	26.3	6.55	8.63	8.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR10a	Middle	2	2	15:57	16:13	24	6.93	26.4	6.52	9.18	7.9
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR10a	Bottom	3	1	15:57	16:13	24	6.86	26.5	6.57	9.77	7.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Flood	SR10a	Bottom	3	2	15:57	16:13	24.1	6.87	26.4	6.54	9.87	8.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS4	Surface	1	1	09:30	09:47	23.9	6.93	25.5	6.82	5.69	6.1
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS4	Surface	1	2	09:30	09:47	23.9	6.96	25.6	6.85	5.51	5.1
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS4	Middle	2	1	09:30	09:47	23.9	6.97	25.8	6.74	5.85	5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS4	Middle	2	2	09:30	09:47	24	6.99	25.9	6.71	6.7	4.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS4	Bottom	3	1	09:30	09:47	24	7.01	26	6.6	7.14	8.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS4	Bottom	3	2	09:30	09:47	24.1	7	26.1	6.57	7.79	7.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS6	Surface	1	1	12:12	12:28	24	6.84	26.1	6.49	7.28	7.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS6	Surface	1	2	12:12	12:28	24.1	6.82	26.2	6.46	7.81	7.2
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS6	Middle	2	1	12:12	12:28	24	6.81	26.2	6.51	8.07	6.9
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS6	Middle	2	2	12:12	12:28	24	6.82	26.2	6.53	8.32	7.1
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS6	Bottom	3	1	12:12	12:28	24.1	6.85	26.3	6.57	8.86	7.2
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	CS6	Bottom	3	2	12:12	12:28	24.1	6.86	26.4	6.55	8.47	7.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS12	Surface	1	1	10:17	10:35	24.1	6.9	26	6.56	8.33	7.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS12	Surface	1	2	10:17	10:35	24.2	6.87	26.1	6.54	7.58	7.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS12	Middle	2	1	10:17	10:35	24.1	6.84	26.1	6.6	8.3	7.2
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS12	Middle	2	2	10:17	10:35	24.1	6.85	26.1	6.61	7.38	7.6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS12	Bottom	3	1	10:17	10:35	24.1	6.88	26.2	6.48	8.59	7.1
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS12	Bottom	3	2	10:17	10:35	24	6.91	26.3	6.45	8.87	7.2
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS13	Surface	1	1	10:43	11:02	24.1	6.87	26	6.57	7.15	6.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS13	Surface	1	2	10:43	11:02	24.1	6.88	26	6.6	7.49	5.6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS13	Middle	2	1	10:43	11:02	24.1	6.89	26	6.64	7.71	8.3
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS13	Middle	2	2	10:43	11:02	24.1	6.88	26	6.63	7.43	7.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS13	Bottom	3	1	10:43	11:02	24.1	6.91	26.1	6.7	8.43	8.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS13	Bottom	3	2	10:43	11:02	24.2	6.9	26.1	6.68	8.11	9.1

TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS14	Surface	1	1	09:54	10:12	24.1	6.86	26.1	6.51	8.75	6.6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS14	Surface	1	2	09:54	10:12	24.1	6.85	26.1	6.53	8.26	7.8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS14	Middle	2	1	09:54	10:12	24.1	6.87	26.1	6.57	8.97	9
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS14	Middle	2	2	09:54	10:12	24.1	6.89	26.2	6.59	8.27	9.1
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS14	Bottom	3	1	09:54	10:12	24.1	6.9	26.2	6.41	9.48	8.1
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS14	Bottom	3	2	09:54	10:12	24	6.89	26.2	6.4	8.79	8.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS15	Surface	1	1	11:06	11:23	24	6.9	26	6.53	7.34	5.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS15	Surface	1	2	11:06	11:23	24.1	6.88	26.1	6.55	7.39	5.1
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS15	Middle	2	1	11:06	11:23	24.1	6.86	26.1	6.58	8.08	5.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS15	Middle	2	2	11:06	11:23	24.1	6.85	26	6.59	8.42	7.9
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS15	Bottom	3	1	11:06	11:23	24.2	6.89	26.1	6.63	7.93	9.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	IS15	Bottom	3	2	11:06	11:23	24.1	6.9	26.1	6.64	7.25	8.2
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR8	Surface	1	1	11:50	12:04	24	6.71	26.1	6.7	8.39	5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR8	Surface	1	2	11:50	12:04	24	6.72	26.1	6.72	8.17	6.9
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR8	Middle	2	1	11:50	12:04						
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR8	Middle	2	2	11:50	12:04						
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR8	Bottom	3	1	11:50	12:04	24	6.74	26.1	6.65	9.76	6.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR8	Bottom	3	2	11:50	12:04	24.1	6.75	26.2	6.67	8.92	8
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR9	Surface	1	1	11:27	11:42	24	6.74	26	6.79	7.94	4.6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR9	Surface	1	2	11:27	11:42	24	6.77	26	6.76	7.96	4.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR9	Middle	2	1	11:27	11:42						
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR9	Middle	2	2	11:27	11:42						
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR9	Bottom	3	1	11:27	11:42	24	6.78	26	6.7	7.32	6.4
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR9	Bottom	3	2	11:27	11:42	24.1	6.79	26	6.72	6.98	5.5
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR10a	Surface	1	1	12:40	12:56	24.1	6.87	26.2	6.53	7.53	6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR10a	Surface	1	2	12:40	12:56	24	6.86	26.2	6.5	7.77	4.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR10a	Middle	2	1	12:40	12:56	24	6.88	26.2	6.46	8.71	7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR10a	Middle	2	2	12:40	12:56	24	6.89	26.3	6.43	9.27	6
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR10a	Bottom	3	1	12:40	12:56	24.1	6.83	26.4	6.48	9.86	7.7
TM-CLK Northern	HY/2012/08	2013-11-15	Mid-Ebb	SR10a	Bottom	3	2	12:40	12:56	24.1	6.84	26.4	6.45	9.95	7.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS4	Surface	1	1	20:07	20:25	24.3	7.31	25.8	6.93	11	9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS4	Surface	1	2	20:07	20:25	24.3	7.33	25.9	6.9	11.8	9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS4	Middle	2	1	20:07	20:25	24.2	7.37	25.9	6.82	8.99	8.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS4	Middle	2	2	20:07	20:25	24.2	7.35	26	6.81	8.76	7.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS4	Bottom	3	1	20:07	20:25	24.1	7.4	26.2	6.67	9.2	8.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS4	Bottom	3	2	20:07	20:25	24	7.39	26.2	6.64	9.27	7.7
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS6	Surface	1	1	17:25	17:43	24.3	7.21	26.3	6.57	6.57	5.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS6	Surface	1	2	17:25	17:43	24.2	7.24	26.2	6.54	7.05	6.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS6	Middle	2	1	17:25	17:43	24.2	7.28	26.3	6.5	6.68	8.8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS6	Middle	2	2	17:25	17:43	24.2	7.27	26.3	6.48	6.37	9.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS6	Bottom	3	1	17:25	17:43	24.1	7.31	26.4	6.59	6.52	9.7

TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	CS6	Bottom	3	2	17:25	17:43	24.1	7.34	26.4	6.61	6.4	10.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS12	Surface	1	1	19:17	19:35	24.3	7.24	26.3	6.73	7.68	9.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS12	Surface	1	2	19:17	19:35	24.4	7.22	26.2	6.7	7.32	9.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS12	Middle	2	1	19:17	19:35	24.2	7.27	26.3	6.65	8.62	10.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS12	Middle	2	2	19:17	19:35	24.2	7.28	26.4	6.62	8.43	9.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS12	Bottom	3	1	19:17	19:35	24.2	7.3	26.4	6.44	9.38	9.7
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS12	Bottom	3	2	19:17	19:35	24.1	7.31	26.4	6.47	9.76	10.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS13	Surface	1	1	18:55	19:12	24.3	7.14	26.1	6.71	7.94	10.7
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS13	Surface	1	2	18:55	19:12	24.3	7.17	26.2	6.69	8.32	9.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS13	Middle	2	1	18:55	19:12	24.3	7.22	26.2	6.66	9.62	11.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS13	Middle	2	2	18:55	19:12	24.3	7.2	26.2	6.65	10.7	12.1
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS13	Bottom	3	1	18:55	19:12	24.3	7.27	26.2	6.59	11.4	12.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS13	Bottom	3	2	18:55	19:12	24.2	7.25	26.3	6.61	11	12.7
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS14	Surface	1	1	19:40	19:58	24.3	7.27	26.3	6.67	7.98	8.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS14	Surface	1	2	19:40	19:58	24.3	7.28	26.3	6.71	8.44	10.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS14	Middle	2	1	19:40	19:58	24.3	7.3	26.4	6.59	7.18	10
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS14	Middle	2	2	19:40	19:58	24.2	7.32	26.4	6.56	8.29	10.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS14	Bottom	3	1	19:40	19:58	24.2	7.34	26.4	6.42	8.44	9.1
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS14	Bottom	3	2	19:40	19:58	24.1	7.35	26.4	6.43	8.16	11.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS15	Surface	1	1	18:32	18:51	24.3	7.28	26.2	6.62	9.84	9.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS15	Surface	1	2	18:32	18:51	24.3	7.3	26.2	6.64	7.98	9.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS15	Middle	2	1	18:32	18:51	24.3	7.32	26.2	6.6	10.4	9.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS15	Middle	2	2	18:32	18:51	24.3	7.33	26.3	6.58	9.37	8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS15	Bottom	3	1	18:32	18:51	24.2	7.35	26.3	6.51	10.2	11.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	IS15	Bottom	3	2	18:32	18:51	24.2	7.37	26.4	6.48	9.85	11.1
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR8	Surface	1	1	17:51	18:04	24.2	7.19	26.2	6.82	6.89	6.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR8	Surface	1	2	17:51	18:04	24.2	7.22	26.3	6.79	6.98	6.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR8	Middle	2	1	17:51	18:04						
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR8	Middle	2	2	17:51	18:04						
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR8	Bottom	3	1	17:51	18:04	24.2	7.24	26.3	6.76	7.32	7.7
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR8	Bottom	3	2	17:51	18:04	24.3	7.25	26.3	6.73	7.26	9.7
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR9	Surface	1	1	18:11	18:27	24.2	7.19	26.1	6.88	7.69	7.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR9	Surface	1	2	18:11	18:27	24.3	7.21	26.1	6.85	7.18	5.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR9	Middle	2	1	18:11	18:27						
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR9	Middle	2	2	18:11	18:27						
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR9	Bottom	3	1	18:11	18:27	24.2	7.24	26.1	6.81	7.98	8.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR9	Bottom	3	2	18:11	18:27	24.2	7.25	26.1	6.79	8.13	8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR10a	Surface	1	1	16:55	17:13	24.3	7.31	26.3	6.61	6.69	6.1
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR10a	Surface	1	2	16:55	17:13	24.3	7.29	26.3	6.59	7.08	6.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR10a	Middle	2	1	16:55	17:13	24.3	7.34	26.3	6.54	6.26	7.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR10a	Middle	2	2	16:55	17:13	24.2	7.35	26.4	6.52	6.32	7.3

TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR10a	Bottom	3	1	16:55	17:13	24.2	7.38	26.4	6.43	6.79	12.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Flood	SR10a	Bottom	3	2	16:55	17:13	24.2	7.4	26.5	6.41	6.61	10.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS4	Surface	1	1	11:31	11:49	24.2	7.28	25.8	6.83	11.5	7.8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS4	Surface	1	2	11:31	11:49	24.2	7.3	25.7	6.81	12.3	7.7
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS4	Middle	2	1	11:31	11:49	24.1	7.34	25.8	6.73	9.14	10.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS4	Middle	2	2	11:31	11:49	24	7.32	25.9	6.72	8.91	10
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS4	Bottom	3	1	11:31	11:49	24	7.37	26	6.58	9.35	10
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS4	Bottom	3	2	11:31	11:49	23.9	7.36	26.1	6.55	9.42	12.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS6	Surface	1	1	14:50	15:01	24.2	7.18	26.1	6.48	6.72	6.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS6	Surface	1	2	14:50	15:01	24.1	7.21	26.2	6.45	7.2	5.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS6	Middle	2	1	14:50	15:01	24.1	7.25	26.2	6.41	6.83	7.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS6	Middle	2	2	14:50	15:01	24	7.24	26.1	6.39	6.52	6.8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS6	Bottom	3	1	14:50	15:01	24	7.28	26.2	6.5	6.67	10.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	CS6	Bottom	3	2	14:50	15:01	24.1	7.31	26.3	6.52	6.55	9.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS12	Surface	1	1	12:27	12:45	24.3	7.21	26.1	6.65	7.76	6.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS12	Surface	1	2	12:27	12:45	24.3	7.19	26.2	6.61	7.4	7.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS12	Middle	2	1	12:27	12:45	24.1	7.24	26.3	6.59	8.77	6.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS12	Middle	2	2	12:27	12:45	24.2	7.25	26.2	6.53	8.58	5.8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS12	Bottom	3	1	12:27	12:45	24.1	7.27	26.3	6.35	9.53	10.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS12	Bottom	3	2	12:27	12:45	24.1	7.28	26.4	6.38	8.94	12
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS13	Surface	1	1	12:50	13:04	24.1	7.11	26.1	6.62	8.09	9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS13	Surface	1	2	12:50	13:04	24.2	7.14	26.1	6.6	8.47	8.8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS13	Middle	2	1	12:50	13:04	24.2	7.19	26.2	6.57	9.77	9.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS13	Middle	2	2	12:50	13:04	24.1	7.17	26.1	6.56	11.2	9.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS13	Bottom	3	1	12:50	13:04	24.2	7.24	26.2	6.5	11.9	13.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS13	Bottom	3	2	12:50	13:04	24.3	7.22	26.3	6.52	11.5	13.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS14	Surface	1	1	12:04	12:22	24.2	7.23	26.2	6.58	8.06	11.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS14	Surface	1	2	12:04	12:22	24.1	7.24	26.1	6.6	8.52	12.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS14	Middle	2	1	12:04	12:22	24.2	7.26	26.2	6.5	7.33	11.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS14	Middle	2	2	12:04	12:22	24.2	7.28	26.3	6.47	8.44	11.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS14	Bottom	3	1	12:04	12:22	24	7.31	26.4	6.33	8.59	14.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS14	Bottom	3	2	12:04	12:22	24.1	7.32	26.3	6.34	8.31	13.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS15	Surface	1	1	13:09	13:28	24.2	7.25	26	6.53	9.99	11.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS15	Surface	1	2	13:09	13:28	24.1	7.27	26.1	6.55	8.13	10
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS15	Middle	2	1	13:09	13:28	24.2	7.29	26.3	6.51	10.9	14
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS15	Middle	2	2	13:09	13:28	24.2	7.3	26.2	6.49	9.52	14.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS15	Bottom	3	1	13:09	13:28	24.2	7.32	26.3	6.42	10.6	15.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	IS15	Bottom	3	2	13:09	13:28	24.1	7.34	26.3	6.39	10.1	14.4
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR8	Surface	1	1	14:11	14:26	24.1	7.16	26.1	6.73	7.04	9.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR8	Surface	1	2	14:11	14:26	24	7.19	26.1	6.7	7.13	7.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR8	Middle	2	1	14:11	14:26						

TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR8	Middle	2	2	14:11	14:26						
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR8	Bottom	3	1	14:11	14:26	24.2	7.21	26.1	6.67	7.47	10.9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR8	Bottom	3	2	14:11	14:26	24.2	7.22	26.2	6.64	7.41	8.8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR9	Surface	1	1	13:48	14:06	24.2	7.16	26	6.79	7.84	10.2
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR9	Surface	1	2	13:48	14:06	24.2	7.18	25.9	6.76	7.33	9.7
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR9	Middle	2	1	13:48	14:06						
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR9	Middle	2	2	13:48	14:06						
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR9	Bottom	3	1	13:48	14:06	24.1	7.21	26	6.72	8.14	9.8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR9	Bottom	3	2	13:48	14:06	24.2	7.22	26.1	6.7	8.28	11.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR10a	Surface	1	1	14:31	14:45	24.1	7.28	26.2	6.52	6.84	7.5
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR10a	Surface	1	2	14:31	14:45	24.2	7.26	26.1	6.5	7.23	7.6
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR10a	Middle	2	1	14:31	14:45	24.2	7.31	26.2	6.45	6.41	9.8
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR10a	Middle	2	2	14:31	14:45	24.3	7.32	26.3	6.43	6.77	9
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR10a	Bottom	3	1	14:31	14:45	24.3	7.35	26.4	6.38	6.94	11.3
TM-CLK Northern	HY/2012/08	2013-11-18	Mid-Ebb	SR10a	Bottom	3	2	14:31	14:45	24.3	7.37	26.3	6.26	6.76	10.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS4	Surface	1	1	10:33	10:57	23.1	7.51	24.5	7.06	12.3	6.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS4	Surface	1	2	10:33	10:57	23.2	7.5	24.6	7.04	12.1	7.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS4	Middle	2	1	10:33	10:57	23.1	7.6	24.7	6.74	11.9	6.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS4	Middle	2	2	10:33	10:57	23.2	7.6	24.6	6.76	12	7.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS4	Bottom	3	1	10:33	10:57	23.1	7.63	24.7	6.57	10.7	8.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS4	Bottom	3	2	10:33	10:57	23.1	7.64	24.7	6.6	10.8	8.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS6	Surface	1	1	07:27	07:47	23.2	7.3	24.4	7.08	8.87	7.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS6	Surface	1	2	07:27	07:47	23.3	7.3	24.4	7.1	8.83	6.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS6	Middle	2	1	07:27	07:47	23.2	7.37	24.5	6.93	9.27	5.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS6	Middle	2	2	07:27	07:47	23.2	7.37	24.4	6.97	9.23	6.4
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS6	Bottom	3	1	07:27	07:47	23.1	7.41	24.6	6.99	9.5	7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	CS6	Bottom	3	2	07:27	07:47	23.2	7.42	24.5	7.01	9.48	8.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS12	Surface	1	1	09:46	10:06	23.3	7.35	24.5	7.2	11.4	8.9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS12	Surface	1	2	09:46	10:06	23.2	7.34	24.6	7.18	11	7.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS12	Middle	2	1	09:46	10:06	23.2	7.37	24.6	7.01	10.8	8.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS12	Middle	2	2	09:46	10:06	23.2	7.38	24.6	7.02	10.9	7.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS12	Bottom	3	1	09:46	10:06	23.1	7.41	24.6	6.94	11.3	9.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS12	Bottom	3	2	09:46	10:06	23.1	7.42	24.6	6.9	11.1	8.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS13	Surface	1	1	09:23	09:43	23.2	7.36	24.4	6.95	10.4	8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS13	Surface	1	2	09:23	09:43	23.1	7.37	24.4	6.91	10.5	6.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS13	Middle	2	1	09:23	09:43	23.1	7.42	24.4	6.73	10.7	6.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS13	Middle	2	2	09:23	09:43	23.1	7.43	24.4	6.71	10.8	6
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS13	Bottom	3	1	09:23	09:43	23	7.45	24.5	6.8	11.4	6.6
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS13	Bottom	3	2	09:23	09:43	23.1	7.45	24.5	6.88	11.6	8.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS14	Surface	1	1	10:10	10:30	23.2	7.4	24.6	7.14	10.4	6.9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS14	Surface	1	2	10:10	10:30	23.2	7.4	24.6	7.1	10.3	7.3

TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS14	Middle	2	1	10:10	10:30	23.1	7.56	24.7	7.05	9.94	7.4
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS14	Middle	2	2	10:10	10:30	23.1	7.57	24.6	7.06	9.96	8.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS14	Bottom	3	1	10:10	10:30	23.1	7.47	24.7	7.11	9.9	6
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS14	Bottom	3	2	10:10	10:30	23	7.46	24.7	7.17	9.98	7.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS15	Surface	1	1	09:00	09:20	23.2	7.41	24.3	7.01	9.47	7.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS15	Surface	1	2	09:00	09:20	23.2	7.4	24.3	7	9.41	7.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS15	Middle	2	1	09:00	09:20	23.1	7.47	24.4	6.88	9.82	7.4
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS15	Middle	2	2	09:00	09:20	23.1	7.48	24.5	6.82	9.88	8.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS15	Bottom	3	1	09:00	09:20	23	7.4	24.5	6.84	10.2	7.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	IS15	Bottom	3	2	09:00	09:20	23	7.41	24.5	6.86	10.3	6
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR8	Surface	1	1	08:13	08:32	23.3	7.34	24.4	6.94	10.7	8.4
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR8	Surface	1	2	08:13	08:32	23.2	7.35	24.4	6.96	10.8	7.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR8	Middle	2	1	08:13	08:32						
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR8	Middle	2	2	08:13	08:32						
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR8	Bottom	3	1	08:13	08:32	23	7.44	24.6	6.74	11	7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR8	Bottom	3	2	08:13	08:32	23.1	7.43	24.5	6.78	11.1	8.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR9	Surface	1	1	08:35	08:55	23.1	7.33	24.3	6.87	9.98	6.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR9	Surface	1	2	08:35	08:55	23.2	7.34	24.4	6.9	9.92	6.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR9	Middle	2	1	08:35	08:55						
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR9	Middle	2	2	08:35	08:55						
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR9	Bottom	3	1	08:35	08:55	23	7.31	24.5	6.72	12.1	7.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR9	Bottom	3	2	08:35	08:55	23.1	7.32	24.6	6.78	12	6.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR10a	Surface	1	1	07:50	08:10	23.2	7.27	24.5	7.17	8.99	6.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR10a	Surface	1	2	07:50	08:10	23.2	7.28	24.5	7.13	9.02	6.9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR10a	Middle	2	1	07:50	08:10	23.2	7.33	24.5	7.04	9.17	7.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR10a	Middle	2	2	07:50	08:10	23.2	7.33	24.5	7.01	9.13	5.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR10a	Bottom	3	1	07:50	08:10	23.1	7.39	24.6	6.9	9.3	8.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Flood	SR10a	Bottom	3	2	07:50	08:10	23.1	7.39	24.5	6.88	9.27	8.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS4	Surface	1	1	12:40	13:00	23.2	7.34	24.4	7.18	9.91	5.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS4	Surface	1	2	12:40	13:00	23.2	7.3	24.5	7.15	9.93	6.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS4	Middle	2	1	12:40	13:00	23.2	7.42	24.6	6.83	11.8	8.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS4	Middle	2	2	12:40	13:00	23.2	7.41	24.5	6.87	11.9	8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS4	Bottom	3	1	12:40	13:00	23.1	7.45	24.7	7.08	11.7	10.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS4	Bottom	3	2	12:40	13:00	23.1	7.46	24.6	7.1	11.6	11
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS6	Surface	1	1	15:47	16:10	23.3	7.28	24.4	6.8	8.74	7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS6	Surface	1	2	15:47	16:10	23.2	7.29	24.3	6.84	8.78	7.4
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS6	Middle	2	1	15:47	16:10	23.2	7.31	24.5	6.73	9.01	7.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS6	Middle	2	2	15:47	16:10	23.2	7.31	24.5	6.77	9.09	6.4
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS6	Bottom	3	1	15:47	16:10	23.1	7.47	24.6	6.98	9.57	9.6
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	CS6	Bottom	3	2	15:47	16:10	23.1	7.48	24.6	7	9.6	7.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS12	Surface	1	1	13:26	13:46	23.3	7.34	24.4	7.08	10.8	8.1

TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS12	Surface	1	2	13:26	13:46	23.2	7.34	24.4	7.1	11	7.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS12	Middle	2	1	13:26	13:46	23.1	7.51	24.5	7	11.5	9.9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS12	Middle	2	2	13:26	13:46	23.2	7.5	24.4	7.02	11.4	8.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS12	Bottom	3	1	13:26	13:46	23.1	7.48	24.6	6.82	11.3	11
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS12	Bottom	3	2	13:26	13:46	23.1	7.49	24.6	6.88	11.1	9.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS13	Surface	1	1	13:50	14:10	23.2	7.31	24.4	6.94	12	4.6
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS13	Surface	1	2	13:50	14:10	23.2	7.31	24.4	6.96	12.1	4.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS13	Middle	2	1	13:50	14:10	23.2	7.27	24.5	6.91	11.2	4.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS13	Middle	2	2	13:50	14:10	23.2	7.28	24.6	6.93	11	6.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS13	Bottom	3	1	13:50	14:10	23.1	7.2	24.6	7.02	10.8	7.9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS13	Bottom	3	2	13:50	14:10	23.1	7.2	24.6	7.01	10.4	6.4
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS14	Surface	1	1	13:03	13:23	23.3	7.36	24.5	7.01	9.48	8.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS14	Surface	1	2	13:03	13:23	23.2	7.37	24.5	7.02	9.5	7.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS14	Middle	2	1	13:03	13:23	23.2	7.43	24.5	6.97	12.6	8.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS14	Middle	2	2	13:03	13:23	23.2	7.43	24.5	6.91	12.5	9.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS14	Bottom	3	1	13:03	13:23	23	7.5	24.6	6.94	12.1	8.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS14	Bottom	3	2	13:03	13:23	23.1	7.51	24.6	6.97	12.2	8.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS15	Surface	1	1	14:13	14:33	23.3	7.3	24.4	6.88	12.1	9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS15	Surface	1	2	14:13	14:33	23.3	7.28	24.5	6.9	12.2	8.1
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS15	Middle	2	1	14:13	14:33	23.2	7.25	24.6	6.72	10.4	9.9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS15	Middle	2	2	14:13	14:33	23.3	7.26	24.6	6.77	10.5	9.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS15	Bottom	3	1	14:13	14:33	23.2	7.34	24.6	6.93	10.9	11.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	IS15	Bottom	3	2	14:13	14:33	23.1	7.33	24.6	6.91	10.6	12.2
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR8	Surface	1	1	15:00	15:20	23.2	7.3	24.4	7.02	10.9	7.5
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR8	Surface	1	2	15:00	15:20	23.2	7.29	24.4	7.06	11.1	7.6
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR8	Middle	2	1	15:00	15:20						
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR8	Middle	2	2	15:00	15:20						
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR8	Bottom	3	1	15:00	15:20	23.1	7.4	24.5	6.82	12.2	9.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR8	Bottom	3	2	15:00	15:20	23.1	7.39	24.6	6.86	12	8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR9	Surface	1	1	14:36	14:56	23.2	7.21	24.3	7	11.9	6.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR9	Surface	1	2	14:36	14:56	23.2	7.21	24.4	7.08	11.4	7.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR9	Middle	2	1	14:36	14:56						
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR9	Middle	2	2	14:36	14:56						
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR9	Bottom	3	1	14:36	14:56	23.1	7.36	24.7	6.83	10.8	6.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR9	Bottom	3	2	14:36	14:56	23.1	7.39	24.6	6.85	10.9	8.8
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR10a	Surface	1	1	15:24	15:44	23.2	7.2	24.4	6.97	9.23	6.9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR10a	Surface	1	2	15:24	15:44	23.2	7.21	24.3	6.99	9.2	8.7
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR10a	Middle	2	1	15:24	15:44	23.2	7.3	24.5	7.07	8.98	8.9
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR10a	Middle	2	2	15:24	15:44	23.1	7.3	24.5	7.01	8.99	9.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR10a	Bottom	3	1	15:24	15:44	23	7.35	24.5	6.58	9.07	7.3
TM-CLK Northern	HY/2012/08	2013-11-20	Mid-Ebb	SR10a	Bottom	3	2	15:24	15:44	23.1	7.36	24.6	6.6	9.1	8.8

TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS4	Surface	1	1	12:00	12:16	22.7	7.77	24.2	6.16	8.51	8.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS4	Surface	1	2	13:49	14:07	22.7	7.77	24.2	6.13	8.49	8.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS4	Middle	2	1	13:49	14:07	22.8	7.79	24.3	6.09	9.62	9.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS4	Middle	2	2	13:49	14:07	22.8	7.78	243	6.07	9.6	8.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS4	Bottom	3	1	13:49	14:07	22.8	7.79	24.7	5.95	11.3	11.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS4	Bottom	3	2	13:49	14:07	22.8	7.79	24.7	5.99	11.3	11.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS6	Surface	1	1	08:46	09:02	22.7	7.69	24	6.02	7.23	6.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS6	Surface	1	2	08:46	09:02	22.7	7.68	24	6.05	7.28	6.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS6	Middle	2	1	08:46	09:02	22.9	7.67	24.6	5.95	7.75	7.7
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS6	Middle	2	2	08:46	09:02	22.9	7.68	24.6	5.91	7.71	9.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS6	Bottom	3	1	08:46	09:02	22.9	7.69	24.8	5.96	8.26	7.5
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	CS6	Bottom	3	2	08:46	09:02	22.9	7.69	24.8	5.98	8.22	7.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS12	Surface	1	1	11:10	11:25	22.7	7.78	24.2	6.16	10.3	6.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS12	Surface	1	2	14:42	14:57	22.7	7.77	24.2	6.15	10.3	7.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS12	Middle	2	1	14:42	14:57	22.8	7.76	24.6	6.01	9.03	6.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS12	Middle	2	2	14:42	14:57	22.8	7.76	24.6	5.97	9.07	7.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS12	Bottom	3	1	14:42	14:57	22.9	7.78	24.6	6	9.67	9.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS12	Bottom	3	2	14:42	14:57	22.9	7.77	24.6	6.03	9.62	8.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS13	Surface	1	1	10:46	11:02	22.8	7.74	24.1	6.06	7.19	6.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS13	Surface	1	2	15:03	15:21	22.7	7.74	24.1	6.03	7.12	5.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS13	Middle	2	1	15:03	15:21	23	7.73	24.9	5.87	8.29	8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS13	Middle	2	2	15:03	15:21	23	7.74	24.9	5.84	8.26	6.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS13	Bottom	3	1	15:03	15:21	23	7.75	24.9	5.94	8.32	7
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS13	Bottom	3	2	15:03	15:21	23	7.76	24.9	5.9	8.27	7.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS14	Surface	1	1	11:30	11:46	22.7	7.79	24.2	6.13	8.62	6.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS14	Surface	1	2	14:21	14:36	22.7	7.78	24.2	6.15	8.57	7.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS14	Middle	2	1	14:21	14:36	22.8	7.78	24.4	6.06	6.55	5.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS14	Middle	2	2	14:21	14:36	22.8	7.78	24.4	6.02	6.51	5.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS14	Bottom	3	1	14:21	14:36	22.8	7.76	24.6	5.97	10.2	11.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS14	Bottom	3	2	14:21	14:36	22.8	7.7	24.6	5.93	10.2	12.5
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS15	Surface	1	1	10:25	10:40	22.8	7.7	24.1	6.02	6.51	5.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS15	Surface	1	2	15:27	15:42	22.8	7.71	24.1	6.05	6.47	6.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS15	Middle	2	1	15:27	15:42	23	7.72	24.9	5.83	7.54	7.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS15	Middle	2	2	15:27	15:42	23	7.72	24.9	5.79	7.5	6.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS15	Bottom	3	1	15:27	15:42	23	7.72	24.9	5.89	11.2	8.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	IS15	Bottom	3	2	15:27	15:42	23	7.73	24.9	5.86	11.2	8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR8	Surface	1	1	09:52	10:03	22.8	7.72	24.8	5.92	9	8.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR8	Surface	1	2	16:07	16:18	22.8	7.71	24.8	5.95	9.06	7.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR8	Middle	2	1	16:07	16:18						
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR8	Middle	2	2	16:07	16:18						
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR8	Bottom	3	1	16:07	16:18	22.8	7.71	24.9	5.9	10.8	8.9

TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR8	Bottom	3	2	16:07	16:18	22.9	7.71	24.9	5.87	10.8	9.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR9	Surface	1	1	10:08	10:20	22.9	7.69	24.7	6.06	7.78	5.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR9	Surface	1	2	15:48	16:00	22.9	7.69	24.6	6.03	7.74	7.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR9	Middle	2	1	15:48	16:00						
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR9	Middle	2	2	15:48	16:00						
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR9	Bottom	3	1	15:48	16:00	22.8	7.7	24.8	6.01	8.54	9.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR9	Bottom	3	2	15:48	16:00	22.8	7.69	24.7	5.99	8.49	7.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR10a	Surface	1	1	09:19	09:34	22.6	7.68	24.1	6.18	7.38	7.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR10a	Surface	1	2	09:19	09:34	22.6	7.67	24.1	6.14	7.32	6.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR10a	Middle	2	1	09:19	09:34	22.8	7.69	24.6	5.98	8.05	7.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR10a	Middle	2	2	09:19	09:34	22.8	7.7	24.5	5.94	8.01	7.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR10a	Bottom	3	1	09:19	09:34	22.9	7.7	24.9	5.94	7.88	10
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Flood	SR10a	Bottom	3	2	09:19	09:34	22.9	7.71	24.9	5.9	7.82	8.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS4	Surface	1	1	13:49	14:07	23	7.66	24.3	6.14	8.59	6.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS4	Surface	1	2	13:49	14:07	23	7.67	24.3	6.17	8.55	7
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS4	Middle	2	1	13:49	14:07	23	7.69	24.5	6.1	10.5	8.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS4	Middle	2	2	13:49	14:07	23	7.68	24.5	6.07	10.5	8.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS4	Bottom	3	1	13:49	14:07	23.1	7.68	24.7	5.98	12.5	11.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS4	Bottom	3	2	13:49	14:07	23.1	7.67	24.7	5.94	12.5	11.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS6	Surface	1	1	16:28	16:45	22.8	7.79	24.1	6.1	6.45	5.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS6	Surface	1	2	16:28	16:45	22.8	7.79	24.1	6.13	6.51	5.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS6	Middle	2	1	16:28	16:45	23	7.78	24.7	6.04	8.24	5.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS6	Middle	2	2	16:28	16:45	23	7.79	24.7	6.07	8.2	5
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS6	Bottom	3	1	16:28	16:45	23	7.79	24.8	5.98	7.13	6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	CS6	Bottom	3	2	16:28	16:45	23	7.79	24.8	5.95	7.07	5.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS12	Surface	1	1	14:42	14:57	23	7.72	24.2	6.19	7.88	9.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS12	Surface	1	2	14:42	14:57	23	7.71	24.2	6.16	7.82	7.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS12	Middle	2	1	14:42	14:57	23.1	7.7	24.5	6.05	9.94	11.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS12	Middle	2	2	14:42	14:57	23.1	7.7	24.5	6.08	9.9	9.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS12	Bottom	3	1	14:42	14:57	23.1	7.69	24.6	5.9	10.3	11.5
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS12	Bottom	3	2	14:42	14:57	23.1	7.7	24.5	5.86	10.3	12.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS13	Surface	1	1	15:03	15:21	23	7.75	24.1	6.1	7.24	6.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS13	Surface	1	2	15:03	15:21	23	7.75	24.1	6.13	7.2	7.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS13	Middle	2	1	15:03	15:21	23.1	7.76	24.8	5.92	8.22	7.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS13	Middle	2	2	15:03	15:21	23.1	7.76	24.8	5.95	8.17	8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS13	Bottom	3	1	15:03	15:21	23.1	7.76	24.9	5.93	11.4	10.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS13	Bottom	3	2	15:03	15:21	23.1	7.75	24.9	5.89	11.4	10.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS14	Surface	1	1	14:21	14:36	23	7.69	24.3	6.11	7.22	6.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS14	Surface	1	2	14:21	14:36	23	7.7	24.3	6.08	7.17	6.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS14	Middle	2	1	14:21	14:36	23.1	7.7	24.6	6.04	8.95	12.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS14	Middle	2	2	14:21	14:36	23.1	7.71	24.6	6.02	8.91	11.2

TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS14	Bottom	3	1	14:21	14:36	23.1	7.71	24.7	5.95	12.3	12.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS14	Bottom	3	2	14:21	14:36	23.1	7.71	24.7	5.91	12.3	12.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS15	Surface	1	1	15:27	15:42	23	7.77	24.2	6.05	6.9	5.7
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS15	Surface	1	2	15:27	15:42	23	7.76	24.2	6.08	6.94	6.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS15	Middle	2	1	15:27	15:42	23.1	7.77	24.8	5.88	8.8	4.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS15	Middle	2	2	15:27	15:42	23.1	7.78	24.8	5.85	8.86	5.6
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS15	Bottom	3	1	15:27	15:42	23.1	7.78	24.9	5.9	10.2	10.7
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	IS15	Bottom	3	2	15:27	15:42	23.1	7.78	24.9	5.94	10.2	10.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR8	Surface	1	1	16:07	16:18	22.9	7.77	24.8	5.97	8.8	5.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR8	Surface	1	2	16:07	16:18	22.9	7.78	24.8	5.99	8.86	5.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR8	Middle	2	1	16:07	16:18						
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR8	Middle	2	2	16:07	16:18						
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR8	Bottom	3	1	16:07	16:18	22.9	7.79	24.9	5.96	9.45	9.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR8	Bottom	3	2	16:07	16:18	22.9	7.78	24.9	5.9	9.4	7.8
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR9	Surface	1	1	15:48	16:00	23	7.78	24.8	6.07	7.95	5.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR9	Surface	1	2	15:48	16:00	23	7.78	24.8	6.05	7.91	6.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR9	Middle	2	1	15:48	16:00						
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR9	Middle	2	2	15:48	16:00						
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR9	Bottom	3	1	15:48	16:00	22.9	7.78	24.8	6.04	7.87	10.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR9	Bottom	3	2	15:48	16:00	22.9	7.78	24.8	6.06	7.84	8.4
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR10a	Surface	1	1	17:02	17:19	22.8	7.78	24.1	6.06	7.66	7.9
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR10a	Surface	1	2	17:02	17:19	22.8	7.79	24.1	6.02	7.6	8.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR10a	Middle	2	1	17:02	17:19	23	7.79	24.8	5.91	8.09	7.1
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR10a	Middle	2	2	17:02	17:19	23	7.78	24.8	5.95	8.03	7.2
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR10a	Bottom	3	1	17:02	17:19	23	7.78	24.9	5.92	8.61	11.3
TM-CLK Northern	HY/2012/08	2013-11-22	Mid-Ebb	SR10a	Bottom	3	2	17:02	17:19	23	7.77	24.9	5.95	8.57	9.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS4	Surface	1	1	14:26	14:44	22.7	7.8	24.2	6.25	3.04	3.6
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS4	Surface	1	2	14:26	14:44	22.8	7.8	24.3	6.22	3.08	4.8
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS4	Middle	2	1	14:26	14:44	22.8	7.82	24.3	6.18	2.49	2.5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS4	Middle	2	2	14:26	14:44	22.9	7.81	24.4	6.16	2.5	2.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS4	Bottom	3	1	14:26	14:44	23	7.82	24.6	6.04	2.72	4.6
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS4	Bottom	3	2	14:26	14:44	23	7.81	24.5	6.08	2.79	5.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS6	Surface	1	1	11:14	11:32	22.8	7.72	23.9	6.11	2.76	4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS6	Surface	1	2	11:14	11:32	22.7	7.71	24	6.14	2.75	2.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS6	Middle	2	1	11:14	11:32	22.9	7.7	24.6	6.04	2.54	3.5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS6	Middle	2	2	11:14	11:32	22.9	7.71	24.5	6.01	2.51	2.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS6	Bottom	3	1	11:14	11:32	22.9	7.72	24.8	6.05	2.45	6.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	CS6	Bottom	3	2	11:14	11:32	23	7.73	24.9	6.07	2.47	4.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS12	Surface	1	1	13:36	13:54	22.7	7.81	24.2	6.25	2.76	3.8
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS12	Surface	1	2	13:36	13:54	22.8	7.8	24.3	6.24	2.81	4.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS12	Middle	2	1	13:36	13:54	22.9	7.79	24.6	6.1	3.21	2.8

TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS12	Middle	2	2	13:36	13:54	22.8	7.78	24.5	6.06	3.18	3.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS12	Bottom	3	1	13:36	13:54	22.9	7.81	24.6	6.09	3.49	4.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS12	Bottom	3	2	13:36	13:54	23	7.8	24.7	6.12	3.51	6.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS13	Surface	1	1	13:12	13:30	22.9	7.77	24.2	6.15	3.74	3.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS13	Surface	1	2	13:12	13:30	23	7.76	24.2	6.12	3.8	3.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS13	Middle	2	1	13:12	13:30	23.1	7.76	25	5.96	2.25	2.8
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS13	Middle	2	2	13:12	13:30	23	7.77	24.9	5.93	2.32	3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS13	Bottom	3	1	13:12	13:30	23	7.78	25	6.03	3.44	3.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS13	Bottom	3	2	13:12	13:30	23.1	7.79	25.1	5.99	3.47	3.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS14	Surface	1	1	14:01	14:20	22.8	7.82	24.3	6.22	2.41	3.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS14	Surface	1	2	14:01	14:20	22.7	7.81	24.3	6.24	2.35	2.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS14	Middle	2	1	14:01	14:20	22.9	7.81	24.4	6.15	2.54	4.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS14	Middle	2	2	14:01	14:20	22.8	7.81	24.5	6.11	2.6	4.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS14	Bottom	3	1	14:01	14:20	22.9	7.79	24.6	6.06	2.72	3.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS14	Bottom	3	2	14:01	14:20	23	7.8	24.5	6.02	2.69	2.8
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS15	Surface	1	1	12:48	13:06	22.9	7.73	24.2	6.11	2.72	2.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS15	Surface	1	2	12:48	13:06	22.8	7.74	24.1	6.14	2.69	3.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS15	Middle	2	1	12:48	13:06	22.9	7.75	24.9	5.92	2.39	3.5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS15	Middle	2	2	12:48	13:06	23	7.74	25	5.88	2.47	4.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS15	Bottom	3	1	12:48	13:06	23.1	7.75	25	5.98	3.52	3.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	IS15	Bottom	3	2	12:48	13:06	23.1	7.75	25	5.95	3.55	3.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR8	Surface	1	1	12:02	12:20	22.8	7.75	24.7	6.01	3.18	3.5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR8	Surface	1	2	12:02	12:20	22.9	7.74	24.8	6.04	3.21	3.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR8	Middle	2	1	12:02	12:20						
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR8	Middle	2	2	12:02	12:20						
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR8	Bottom	3	1	12:02	12:20	22.9	7.74	24.9	5.99	3.24	4.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR8	Bottom	3	2	12:02	12:20	22.9	7.74	24.8	5.96	3.3	4.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR9	Surface	1	1	12:25	12:43	22.8	7.72	24.8	6.15	2.5	4.6
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR9	Surface	1	2	12:25	12:43	22.9	7.71	24.7	6.12	2.54	6
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR9	Middle	2	1	12:25	12:43						
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR9	Middle	2	2	12:25	12:43						
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR9	Bottom	3	1	12:25	12:43	22.9	7.73	24.9	6.1	3.46	5.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR9	Bottom	3	2	12:25	12:43	23	7.72	24.9	6.08	3.52	7.5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR10a	Surface	1	1	11:38	11:56	22.7	7.71	24.1	6.27	2.82	3.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR10a	Surface	1	2	11:38	11:56	22.6	7.7	24.2	6.23	2.88	4.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR10a	Middle	2	1	11:38	11:56	22.8	7.72	24.7	6.07	2.19	5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR10a	Middle	2	2	11:38	11:56	22.9	7.73	24.6	6.03	2.11	6.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR10a	Bottom	3	1	11:38	11:56	23	7.73	24.8	6.04	2.27	5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Flood	SR10a	Bottom	3	2	11:38	11:56	22.9	7.74	24.9	5.99	2.31	6
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS4	Surface	1	1	16:38	16:56	22.8	7.78	24.3	6.19	3.11	4.5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS4	Surface	1	2	16:38	16:56	22.7	7.8	24.3	6.2	3.13	6

TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS4	Middle	2	1	16:38	16:56	22.9	7.76	24.5	6.14	2.52	5.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS4	Middle	2	2	16:38	16:56	22.9	7.74	24.4	6.12	2.54	4.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS4	Bottom	3	1	16:38	16:56	23	7.82	24.7	5.97	2.8	7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS4	Bottom	3	2	16:38	16:56	22.9	7.84	24.6	5.95	2.81	7.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS6	Surface	1	1	19:41	19:51	22.7	7.74	23.9	6.02	2.84	6.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS6	Surface	1	2	19:41	19:51	22.8	7.79	23.9	6.04	2.82	6.5
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS6	Middle	2	1	19:41	19:51	22.9	7.74	24.6	5.94	2.55	6.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS6	Middle	2	2	19:41	19:51	22.8	7.76	24.5	5.96	2.57	7.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS6	Bottom	3	1	19:41	19:51	23	7.69	24.8	6	2.5	8.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	CS6	Bottom	3	2	19:41	19:51	23.1	7.68	24.9	5.98	2.52	7.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS12	Surface	1	1	17:24	17:42	22.7	7.74	24.2	6.17	2.79	3.8
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS12	Surface	1	2	17:24	17:42	22.8	7.76	24.2	6.19	2.81	2.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS12	Middle	2	1	17:24	17:42	22.9	7.82	24.5	6.04	3.24	3.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS12	Middle	2	2	17:24	17:42	22.8	7.84	24.4	6.06	3.26	2.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS12	Bottom	3	1	17:24	17:42	23	7.86	24.6	6	3.56	4.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS12	Bottom	3	2	17:24	17:42	22.9	7.88	24.7	6.02	3.58	4.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS13	Surface	1	1	17:47	18:05	22.9	7.75	24.1	6.11	3.82	4.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS13	Surface	1	2	17:47	18:05	22.9	7.77	24.1	6.09	3.81	3.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS13	Middle	2	1	17:47	18:05	23	7.74	24.8	5.87	2.35	3.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS13	Middle	2	2	17:47	18:05	22.9	7.72	24.9	5.89	2.37	4.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS13	Bottom	3	1	17:47	18:05	23.1	7.81	25.1	5.92	3.52	4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS13	Bottom	3	2	17:47	18:05	23	7.83	25	5.9	3.54	4.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS14	Surface	1	1	17:01	17:19	22.7	7.77	24.3	6.15	2.44	2.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS14	Surface	1	2	17:01	17:19	22.7	7.79	24.2	6.17	2.46	3.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS14	Middle	2	1	17:01	17:19	22.8	7.82	24.4	6.07	2.62	3.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS14	Middle	2	2	17:01	17:19	22.9	7.8	24.5	6.09	2.64	5.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS14	Bottom	3	1	17:01	17:19	23	7.83	24.6	5.99	2.82	6.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS14	Bottom	3	2	17:01	17:19	23.1	7.85	24.6	6.01	2.8	7.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS15	Surface	1	1	18:10	18:28	22.8	7.71	24.2	6.06	2.75	3.6
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS15	Surface	1	2	18:10	18:28	22.9	7.73	24.1	6.08	2.77	3.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS15	Middle	2	1	18:10	18:28	23	7.78	24.9	5.84	2.64	5.8
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS15	Middle	2	2	18:10	18:28	22.9	7.8	24.9	5.86	2.66	4.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS15	Bottom	3	1	18:10	18:28	23.1	7.76	25	5.91	3.57	8.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	IS15	Bottom	3	2	18:10	18:28	23	7.74	24.9	5.83	3.58	6.6
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR8	Surface	1	1	18:56	19:14	22.9	7.69	24.8	5.92	3.24	7.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR8	Surface	1	2	18:56	19:14	22.8	7.71	24.7	5.94	3.36	5.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR8	Middle	2	1	18:56	19:14						
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR8	Middle	2	2	18:56	19:14						
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR8	Bottom	3	1	18:56	19:14	23	7.75	24.9	5.87	3.32	7.4
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR8	Bottom	3	2	18:56	19:14	22.9	7.78	24.9	5.85	3.34	6.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR9	Surface	1	1	18:33	18:51	22.8	7.69	24.7	6.04	2.56	2.7

TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR9	Surface	1	2	18:33	18:51	22.8	7.67	24.8	6.02	2.58	2.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR9	Middle	2	1	18:33	18:51						
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR9	Middle	2	2	18:33	18:51						
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR9	Bottom	3	1	18:33	18:51	22.9	7.74	24.9	5.94	3.54	6.6
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR9	Bottom	3	2	18:33	18:51	22.8	7.76	24.8	5.92	3.56	5.1
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR10a	Surface	1	1	19:19	19:37	22.8	7.64	24	6.21	2.91	3.2
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR10a	Surface	1	2	19:19	19:37	22.8	7.66	24.1	6.22	2.93	4.7
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR10a	Middle	2	1	19:19	19:37	22.9	7.69	24.6	6.01	2.22	4.3
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR10a	Middle	2	2	19:19	19:37	23	7.71	24.6	5.99	2.24	5.8
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR10a	Bottom	3	1	19:19	19:37	23.1	7.76	24.9	5.84	2.3	3.9
TM-CLK Northern	HY/2012/08	2013-11-25	Mid-Ebb	SR10a	Bottom	3	2	19:19	19:37	23	7.78	24.8	5.86	2.32	4.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS4	Surface	1	1	16:03	16:20	22.9	7.72	24.3	6.29	3.74	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS4	Surface	1	2	16:03	16:20	22.8	7.73	24.4	6.27	3.49	4.3
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS4	Middle	2	1	16:03	16:20	22.8	7.78	24.5	6.16	3.58	5.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS4	Middle	2	2	16:03	16:20	22.8	7.8	24.5	6.18	4.01	4.5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS4	Bottom	3	1	16:03	16:20	22.9	7.79	24.7	6.02	3.75	6.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS4	Bottom	3	2	16:03	16:20	22.9	7.8	24.7	6.04	3.56	5.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS6	Surface	1	1	13:20	13:37	22.8	7.64	24	6.23	2.98	5.5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS6	Surface	1	2	13:20	13:37	22.8	7.67	24	6.27	2.97	5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS6	Middle	2	1	13:20	13:37	22.9	7.7	24.5	6.08	3.75	4.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS6	Middle	2	2	13:20	13:37	22.9	7.68	24.6	6.11	3.45	5.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS6	Bottom	3	1	13:20	13:37	22.9	7.69	24.9	6.01	3.13	3.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	CS6	Bottom	3	2	13:20	13:37	22.9	7.7	24.9	5.98	3.07	5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS12	Surface	1	1	15:13	15:32	22.8	7.64	24.3	6.29	4.74	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS12	Surface	1	2	15:13	15:32	22.9	7.67	24.4	6.27	4.5	6.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS12	Middle	2	1	15:13	15:32	22.8	7.69	24.6	6.18	4.87	6.5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS12	Middle	2	2	15:13	15:32	22.7	7.67	24.6	6.15	4.68	5.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS12	Bottom	3	1	15:13	15:32	22.8	7.7	24.7	6.04	5.09	6.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS12	Bottom	3	2	15:13	15:32	22.7	7.72	24.8	6.05	5	7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS13	Surface	1	1	14:50	15:08	22.9	7.7	24.2	6.07	5.14	5.2
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS13	Surface	1	2	14:50	15:08	22.9	7.72	24.2	6.09	5.21	4.2
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS13	Middle	2	1	14:50	15:08	22.9	7.74	24.8	5.82	4.72	5.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS13	Middle	2	2	14:50	15:08	23	7.73	24.9	5.85	5.05	5.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS13	Bottom	3	1	14:50	15:08	22.9	7.74	25	5.76	4.38	8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS13	Bottom	3	2	14:50	15:08	23	7.75	25	5.78	4.49	6.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS14	Surface	1	1	15:37	15:56	22.9	7.69	24.4	6.24	5.03	4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS14	Surface	1	2	15:37	15:56	22.9	7.67	24.4	6.21	4.87	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS14	Middle	2	1	15:37	15:56	22.8	7.72	24.5	6.13	4.2	3
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS14	Middle	2	2	15:37	15:56	22.8	7.73	24.6	6.11	4.57	3.3
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS14	Bottom	3	1	15:37	15:56	22.8	7.75	24.7	5.96	4.33	5.5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS14	Bottom	3	2	15:37	15:56	22.8	7.76	24.7	5.99	4.11	5.6

TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS15	Surface	1	1	14:28	14:45	22.8	7.74	24.3	6.13	4.49	4.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS15	Surface	1	2	14:28	14:45	22.9	7.75	24.4	6.1	4.36	5.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS15	Middle	2	1	14:28	14:45	22.8	7.72	24.7	5.93	4.19	5.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS15	Middle	2	2	14:28	14:45	22.8	7.71	24.8	5.89	4.12	5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS15	Bottom	3	1	14:28	14:45	22.9	7.76	25	5.82	5.27	5.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	IS15	Bottom	3	2	14:28	14:45	23	7.77	24.9	5.8	4.79	6.3
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR8	Surface	1	1	13:45	14:00	22.8	7.7	24.7	6.14	3.78	3.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR8	Surface	1	2	13:45	14:00	22.7	7.71	24.7	6.17	3.34	5.3
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR8	Middle	2	1	13:45	14:00						
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR8	Middle	2	2	13:45	14:00						
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR8	Bottom	3	1	13:45	14:00	22.8	7.72	24.7	5.97	4.25	4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR8	Bottom	3	2	13:45	14:00	22.8	7.73	24.8	6.02	4.79	5.3
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR9	Surface	1	1	14:07	14:23	22.9	7.7	24.8	6.21	4.11	4.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR9	Surface	1	2	14:07	14:23	22.9	7.72	24.9	6.19	3.95	3.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR9	Middle	2	1	14:07	14:23						
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR9	Middle	2	2	14:07	14:23						
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR9	Bottom	3	1	14:07	14:23	22.8	7.73	24.9	5.88	3.99	4.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR9	Bottom	3	2	14:07	14:23	22.9	7.74	24.9	5.92	3.81	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR10a	Surface	1	1	12:53	13:10	22.7	7.62	24.2	6.33	3.44	4.5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR10a	Surface	1	2	12:53	13:10	22.6	7.61	24.3	6.3	3.62	3.1
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR10a	Middle	2	1	12:53	13:10	22.7	7.66	24.6	6.16	3.76	4.1
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR10a	Middle	2	2	12:53	13:10	22.7	7.67	24.6	6.14	4.11	6.2
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR10a	Bottom	3	1	12:53	13:10	22.8	7.64	24.9	5.92	3.28	6.2
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Flood	SR10a	Bottom	3	2	12:53	13:10	22.8	7.65	24.8	5.94	3.67	5.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS4	Surface	1	1	19:19	19:34	22.6	7.8	24.3	6.04	3.86	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS4	Surface	1	2	19:19	19:34	22.7	7.81	24.4	6.06	3.74	6.2
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS4	Middle	2	1	19:19	19:34	22.8	7.77	24.6	5.88	3.99	4.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS4	Middle	2	2	19:19	19:34	22.7	7.78	24.6	5.9	3.93	5.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS4	Bottom	3	1	19:19	19:34	22.8	7.84	24.8	5.73	3.73	6.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS4	Bottom	3	2	19:19	19:34	22.8	7.85	24.7	5.77	3.96	6.5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS6	Surface	1	1	22:30	22:49	22.8	7.7	24	6.31	3.04	4.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS6	Surface	1	2	22:30	22:49	22.7	7.68	24	6.33	3.06	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS6	Middle	2	1	22:30	22:49	22.9	7.72	24.5	6.17	3.54	5.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS6	Middle	2	2	22:30	22:49	22.8	7.71	24.4	6.13	3.69	4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS6	Bottom	3	1	22:30	22:49	22.9	7.7	24.8	5.94	3.19	5.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	CS6	Bottom	3	2	22:30	22:49	22.8	7.68	24.8	5.96	3.24	5.2
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS12	Surface	1	1	20:04	20:19	22.6	7.68	24.2	6.3	4.81	5.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS12	Surface	1	2	20:04	20:19	22.7	7.69	24.3	6.28	4.98	5.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS12	Middle	2	1	20:04	20:19	22.8	7.79	24.4	6	4.66	5.3
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS12	Middle	2	2	20:04	20:19	22.7	7.78	24.5	6.04	4.53	6.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS12	Bottom	3	1	20:04	20:19	22.8	7.86	24.7	5.74	5.16	8.5

TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS12	Bottom	3	2	20:04	20:19	22.8	7.87	24.8	5.75	5.05	8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS13	Surface	1	1	20:24	20:39	22.7	7.76	24.2	6.02	5.24	5.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS13	Surface	1	2	20:24	20:39	22.7	7.74	24.2	6.09	5.37	5.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS13	Middle	2	1	20:24	20:39	22.9	7.79	24.8	5.93	4.97	5.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS13	Middle	2	2	20:24	20:39	22.8	7.78	24.7	5.9	4.91	4.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS13	Bottom	3	1	20:24	20:39	22.9	7.7	24.9	5.88	4.62	7.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS13	Bottom	3	2	20:24	20:39	22.8	7.69	24.8	5.89	4.5	6.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS14	Surface	1	1	19:44	19:59	22.7	7.72	24.3	6.2	4.83	6.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS14	Surface	1	2	19:44	19:59	22.7	7.73	24.3	6.17	4.7	4.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS14	Middle	2	1	19:44	19:59	22.8	7.72	24.5	5.94	4.47	5.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS14	Middle	2	2	19:44	19:59	22.8	7.71	24.6	5.97	4.38	5.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS14	Bottom	3	1	19:44	19:59	22.8	7.9	24.7	5.88	4.49	8.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS14	Bottom	3	2	19:44	19:59	22.9	7.91	24.7	5.9	4.58	8.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS15	Surface	1	1	20:44	21:00	22.7	7.7	24.3	6.07	4.53	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS15	Surface	1	2	20:44	21:00	22.6	7.7	24.4	6.03	4.65	4.5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS15	Middle	2	1	20:44	21:00	22.7	7.76	24.6	6.02	4.37	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS15	Middle	2	2	20:44	21:00	22.8	7.75	24.5	6.07	4.42	5.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS15	Bottom	3	1	20:44	21:00	22.8	7.8	24.9	5.83	5.11	5.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	IS15	Bottom	3	2	20:44	21:00	22.8	7.81	24.8	5.8	5.2	6.3
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR8	Surface	1	1	21:28	21:43	22.7	7.78	24.5	6.2	3.59	4.7
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR8	Surface	1	2	21:28	21:43	22.7	7.79	24.4	6.22	3.62	4.2
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR8	Middle	2	1	21:28	21:43						
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR8	Middle	2	2	21:28	21:43						
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR8	Bottom	3	1	21:28	21:43	22.7	7.74	24.8	6.01	4.61	7.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR8	Bottom	3	2	21:28	21:43	22.8	7.7	24.7	6	4.78	6.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR9	Surface	1	1	21:06	21:21	22.8	7.68	24.8	6.01	4.17	4.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR9	Surface	1	2	21:06	21:21	22.7	7.69	24.8	6.09	4.27	4.4
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR9	Middle	2	1	21:06	21:21						
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR9	Middle	2	2	21:06	21:21						
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR9	Bottom	3	1	21:06	21:21	22.8	7.7	24.9	5.93	4.09	4.8
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR9	Bottom	3	2	21:06	21:21	22.9	7.71	24.8	5.97	4.2	6.2
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR10a	Surface	1	1	21:58	22:16	22.6	7.68	24.1	6.24	3.76	5.9
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR10a	Surface	1	2	21:58	22:16	22.7	7.69	24.1	6.26	3.8	6.5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR10a	Middle	2	1	21:58	22:16	22.7	7.59	24.5	6.08	3.89	5
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR10a	Middle	2	2	21:58	22:16	22.7	7.6	24.6	6.01	3.96	5.6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR10a	Bottom	3	1	21:58	22:16	22.8	7.62	24.8	5.88	3.57	6
TM-CLK Northern	HY/2012/08	2013-11-27	Mid-Ebb	SR10a	Bottom	3	2	21:58	22:16	22.8	7.63	24.8	5.82	3.63	5.7
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS4	Surface	1	1	17:11	17:30	22.9	7.54	24.2	6.25	2.47	4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS4	Surface	1	2	17:11	17:30	22.8	7.55	24.4	6.24	2.46	3.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS4	Middle	2	1	17:11	17:30	22.9	7.63	24.4	6.23	2.59	3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS4	Middle	2	2	17:11	17:30	23	7.62	24.7	6.24	2.62	3.6

TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS4	Bottom	3	1	17:11	17:30	23.1	7.72	24.9	6.14	3.14	3.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS4	Bottom	3	2	17:11	17:30	23.2	7.74	24.9	6.12	3.12	4.7
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS6	Surface	1	1	14:05	14:24	22.9	7.62	24.1	6.2	2.32	5.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS6	Surface	1	2	14:05	14:24	22.9	7.63	24.2	6.22	2.31	5.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS6	Middle	2	1	14:05	14:24	23	7.6	24.4	6.1	3.8	5.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS6	Middle	2	2	14:05	14:24	23.1	7.58	24.5	6.11	3.78	5.7
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS6	Bottom	3	1	14:05	14:24	23.1	7.61	24.7	6.04	3.31	6.4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	CS6	Bottom	3	2	14:05	14:24	23.1	7.6	24.8	6.02	3.37	5.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS12	Surface	1	1	16:23	16:42	22.8	7.51	24.2	6.44	2.23	2.8
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS12	Surface	1	2	16:23	16:42	22.9	7.53	24.3	6.41	2.21	3.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS12	Middle	2	1	16:23	16:42	22.8	7.64	24.3	6.25	3.12	3.8
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS12	Middle	2	2	16:23	16:42	22.8	7.65	24.5	6.27	3.15	3.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS12	Bottom	3	1	16:23	16:42	22.9	7.69	24.7	6.17	2.85	4.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS12	Bottom	3	2	16:23	16:42	23.1	7.68	24.8	6.19	2.83	3.4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS13	Surface	1	1	15:59	16:18	22.7	7.68	24.1	6.14	2.41	3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS13	Surface	1	2	15:59	16:18	22.8	7.66	24.2	6.16	2.42	3.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS13	Middle	2	1	15:59	16:18	22.9	7.7	24.8	6.07	2.67	2.6
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS13	Middle	2	2	15:59	16:18	22.9	7.69	24.9	6.08	2.66	4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS13	Bottom	3	1	15:59	16:18	23	7.67	25.1	5.94	2.75	4.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS13	Bottom	3	2	15:59	16:18	23.1	7.66	25	5.93	2.72	3.7
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS14	Surface	1	1	16:47	17:06	22.9	7.68	24.4	6.31	2.41	3.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS14	Surface	1	2	16:47	17:06	23	7.67	24.5	6.32	2.43	4.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS14	Middle	2	1	16:47	17:06	22.8	7.59	25	6.2	2.64	3.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS14	Middle	2	2	16:47	17:06	22.9	7.58	25.2	6.23	2.67	3.4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS14	Bottom	3	1	16:47	17:06	22.9	7.61	25.1	6.14	3.15	5.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS14	Bottom	3	2	16:47	17:06	22.9	7.63	25.3	6.19	3.18	3.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS15	Surface	1	1	15:35	15:54	22.9	7.64	24.4	6.14	2.34	4.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS15	Surface	1	2	15:35	15:54	22.8	7.62	24.3	6.12	2.38	3.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS15	Middle	2	1	15:35	15:54	23	7.65	24.8	6.04	3.06	4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS15	Middle	2	2	15:35	15:54	22.9	7.66	24.6	6.04	3.05	5.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS15	Bottom	3	1	15:35	15:54	23.1	7.72	24.8	5.88	2.23	7
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	IS15	Bottom	3	2	15:35	15:54	23	7.73	24.9	5.87	2.25	7.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR8	Surface	1	1	14:53	15:09	22.8	7.65	24.8	6.14	4.53	6.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR8	Surface	1	2	14:53	15:09	22.7	7.66	24.8	6.16	4.52	5.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR8	Middle	2	1	14:53	15:09						
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR8	Middle	2	2	14:53	15:09						
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR8	Bottom	3	1	14:53	15:09	22.8	7.7	25	6.07	3.62	5.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR8	Bottom	3	2	14:53	15:09	22.9	7.71	25.1	6.08	3.64	6.6
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR9	Surface	1	1	15:14	15:30	22.7	7.65	24.6	6.27	3.63	7.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR9	Surface	1	2	15:14	15:30	22.8	7.66	24.7	6.29	3.61	6.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR9	Middle	2	1	15:14	15:30						

TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR9	Middle	2	2	15:14	15:30						
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR9	Bottom	3	1	15:14	15:30	22.9	7.71	24.8	5.96	3.45	8.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR9	Bottom	3	2	15:14	15:30	23	7.73	24.9	5.98	3.41	8.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR10a	Surface	1	1	14:29	14:48	22.8	7.57	24.2	6.32	2.38	4.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR10a	Surface	1	2	14:29	14:48	22.7	7.58	24.1	6.33	2.41	3.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR10a	Middle	2	1	14:29	14:48	22.8	7.62	24.4	6.29	3.39	4.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR10a	Middle	2	2	14:29	14:48	22.9	7.64	24.5	6.27	3.42	4.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR10a	Bottom	3	1	14:29	14:48	23	7.66	24.8	6.04	3.08	5.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Flood	SR10a	Bottom	3	2	14:29	14:48	23	7.67	24.9	6.06	3.11	5.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS4	Surface	1	1	07:54	08:13	22.8	7.69	24.3	6.21	2.34	4.7
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS4	Surface	1	2	09:30	09:47	22.8	7.68	24.3	6.23	2.41	4.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS4	Middle	2	1	09:30	09:47	22.9	7.74	24.5	6.17	3.89	5.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS4	Middle	2	2	09:30	09:47	22.8	7.76	24.6	6.17	3.82	4.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS4	Bottom	3	1	09:30	09:47	23	7.8	24.8	6.02	2.77	5.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS4	Bottom	3	2	09:30	09:47	23	7.78	24.9	6	2.84	6.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS6	Surface	1	1	11:05	11:24	22.9	7.66	24.2	6.17	2.35	5.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS6	Surface	1	2	11:05	11:24	22.8	7.64	24.3	6.19	2.37	4.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS6	Middle	2	1	11:05	11:24	22.8	7.63	24.5	6.02	3.83	8.6
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS6	Middle	2	2	11:05	11:24	22.8	7.61	24.4	6	3.92	8.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS6	Bottom	3	1	11:05	11:24	22.7	7.66	24.8	5.94	3.34	8.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	CS6	Bottom	3	2	11:05	11:24	22.8	7.68	24.9	5.96	3.41	8.4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS12	Surface	1	1	08:42	09:01	22.7	7.6	24.3	6.21	2.43	5.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS12	Surface	1	2	08:42	09:01	22.8	7.62	24.3	6.23	2.47	3.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS12	Middle	2	1	08:42	09:01	22.9	7.67	24.5	6.13	3.42	3.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS12	Middle	2	2	08:42	09:01	22.9	7.69	24.6	6.11	3.49	4.6
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS12	Bottom	3	1	08:42	09:01	23	7.71	24.8	6	3.09	5.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS12	Bottom	3	2	08:42	09:01	22.9	7.73	24.9	5.98	3.13	5.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS13	Surface	1	1	09:06	09:25	22.8	7.71	24.2	6	2.58	3.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS13	Surface	1	2	09:06	09:25	22.8	7.73	24.2	5.98	2.64	3.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS13	Middle	2	1	09:06	09:25	22.9	7.76	24.9	5.8	2.98	5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS13	Middle	2	2	09:06	09:25	22.8	7.78	24.8	5.78	3.01	4.8
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS13	Bottom	3	1	09:06	09:25	23	7.71	25	5.71	2.97	5.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS13	Bottom	3	2	09:06	09:25	23	7.69	24.9	5.73	2.9	4.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS14	Surface	1	1	08:18	08:37	22.9	7.71	24.4	6.19	2.63	3.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS14	Surface	1	2	08:18	08:37	22.8	7.69	24.3	6.17	2.69	3.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS14	Middle	2	1	08:18	08:37	22.8	7.67	24.7	6.09	2.98	3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS14	Middle	2	2	08:18	08:37	22.8	7.65	24.6	6.07	3.02	3.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS14	Bottom	3	1	08:18	08:37	22.9	7.76	24.9	5.92	3.34	2.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS14	Bottom	3	2	08:18	08:37	22.8	7.77	24.9	5.9	3.41	3.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS15	Surface	1	1	09:30	09:49	22.9	7.69	24.3	6.07	2.51	2.6
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS15	Surface	1	2	09:30	09:49	22.8	7.67	24.2	6.05	2.57	3.4

TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS15	Middle	2	1	09:30	09:49	22.9	7.7	24.7	5.91	3.25	4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS15	Middle	2	2	09:30	09:49	22.9	7.71	24.8	5.89	3.29	5.2
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS15	Bottom	3	1	09:30	09:49	23	7.74	24.9	5.77	2.44	4.4
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	IS15	Bottom	3	2	09:30	09:49	22.9	7.76	24.9	5.79	2.48	5.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR8	Surface	1	1	10:15	10:31	22.8	7.69	24.7	6.07	4.58	6.5
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR8	Surface	1	2	10:15	10:31	22.7	7.71	24.8	6.09	4.63	6.6
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR8	Middle	2	1	10:15	10:31						
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR8	Middle	2	2	10:15	10:31						
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR8	Bottom	3	1	10:15	10:31	22.9	7.74	24.9	5.94	3.66	7.8
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR8	Bottom	3	2	10:15	10:31	22.9	7.76	24.9	5.92	3.71	8.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR9	Surface	1	1	09:54	10:10	22.8	7.68	24.7	6.17	3.78	5.6
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR9	Surface	1	2	09:54	10:10	22.9	7.7	24.8	6.15	3.8	6
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR9	Middle	2	1	09:54	10:10						
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR9	Middle	2	2	09:54	10:10						
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR9	Bottom	3	1	09:54	10:10	22.9	7.74	24.9	5.84	3.62	7.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR9	Bottom	3	2	09:54	10:10	22.9	7.76	24.8	5.82	3.64	8.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR10a	Surface	1	1	10:36	10:55	22.7	7.59	24.2	6.29	2.41	4.3
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR10a	Surface	1	2	10:36	10:55	22.8	7.61	24.2	6.27	2.47	4.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR10a	Middle	2	1	10:36	10:55	22.9	7.64	24.5	6.1	3.46	4.9
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR10a	Middle	2	2	10:36	10:55	22.9	7.66	24.6	6.07	3.49	4.7
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR10a	Bottom	3	1	10:36	10:55	23	7.61	24.9	5.89	3.19	6.1
TM-CLK Northern	HY/2012/08	2013-11-29	Mid-Ebb	SR10a	Bottom	3	2	10:36	10:55	22.9	7.63	25	5.91	3.22	4.2

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 1/11/13 *Weather Condition :* Fine *Ambient Temperature (°C) :* 27°C *Sea Conditions:* Calm / [✓ Small Wave] / Great Wave *Tide Mode:* Ebb Tide *Direction of water current:* From CS4 to CS6

Station: CS6 *Duration:* 11=55 *to* 12=10 *Depth of Water (meter):* 10.0 *Wet bulb calibration for DO meter:* 8.41 *mg/L (* 99.5 *%)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			5.0			9.0				
Temp. (°C)	:	26.0	26.0	Ave.: 26.0	25.7	25.7	Ave.: 25.7	25.7	25.7	Ave.: 25.7		
pH	:	7.73	7.74	Ave.: 7.74	7.75	7.75	Ave.: 7.75	7.77	7.77	Ave.: 7.77		
Salinity (ppt)	:	24.9	24.8	Ave.: 24.9	25.2	25.2	Ave.: 25.2	25.2	25.1	Ave.: 25.2		
D.O. (mg/L)	:	8.42	8.45	Ave.: 8.44	7.42	7.39	Ave.: 7.41	7.35	7.38	Ave.: 7.37		
D.O.S. (%)	:	119.2	119.6	Ave.: 119.4	104.7	104.3	Ave.: 104.5	103.9	104.3	Ave.: 104.1		
Turbidity (NTU)	:	7.68	7.64	Ave.: 7.66	7.17	7.12	Ave.: 7.15	7.39	7.36	Ave.: 7.38	7.40	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) *Duration:* 12=25 *to* 13=00 *Depth of Water (meter):* 12.2 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.7 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.1						11.2												
Temp. (°C)	:	26.0	26.0	Ave.: 26.0				25.8	25.8	25.8				25.8	25.8	Ave.: 25.8										
pH	:	7.64	7.65	Ave.: 7.65				7.70	7.71	7.71				7.69	7.70	Ave.: 7.70										
Salinity (ppt)	:	24.9	24.8	Ave.: 24.9				25.2	25.2	Ave.: 25.2				25.2	25.2	Ave.: 25.2										
D.O. (mg/L)	:	8.65	8.61	Ave.: 86.3	5.0	5.0	✓	8.19	8.15	Ave.: 8.17	5.0	5.0	✓	8.06	8.04	Ave.: 8.05	4.7	2.0	✓							
D.O.S. (%)	:	122.3	121.8	Ave.: 122.1				116.2	115.6	Ave.: 115.9				113.9	113.5	Ave.: 113.7										
Turbidity (NTU)	:	4.51	4.57	Ave.: 4.54				3.59	3.63	Ave.: 3.61				3.62	3.66	Ave.: 3.64				3.93	✓	27.5 and 120% of CS4	5.78	47.0 and 130% of CS4	6.27	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 *Duration:* 11=36 *to* 11=50 *Depth of Water (meter):* 4.2 *Wet bulb calibration for DO meter:* 8.43 *mg/L (* 99.5 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.2												
Temp. (°C)	:	26.0	26.0	Ave.: 26.0										25.7	25.7	Ave.: 25.7										
pH	:	7.68	7.67	Ave.: 7.68										7.70	7.71	Ave.: 7.71										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0						Ave.:				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	8.28	8.24	Ave.: 8.26	5.0	4.2	✓			Ave.:	5.0	4.2		8.04	8.01	Ave.: 8.03	4.7	2.0	✓							
D.O.S. (%)	:	117.7	117.2	Ave.: 117.5						Ave.:				113.6	113.2	Ave.: 113.4										
Turbidity (NTU)	:	4.98	4.92	Ave.: 4.95						Ave.:				4.64	4.68	Ave.: 4.66				4.66	✓	27.5 and 120% of CS4	5.78	47.0 and 130% of CS4	6.27	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Con ion)**

Station: SR9 Duration: 11:12 to 11:26 Depth of Water (meter): 5.6 Wet bulb calibration for DO meter: 8.40 mg/L (98.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	25.7	25.7	Ave.: 25.7										25.7	25.7	Ave.: 25.7										
pH	:	7.74	7.74	Ave.: 7.74										7.72	7.72	Ave.: 7.72										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9						Ave.:				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	7.15	7.13	Ave.: 7.14	5.0	4.2	✓			Ave.:	5.0	4.2	✓	7.10	7.07	Ave.: 7.09	4.7	2.0	✓							
D.O.S. (%)	:	100.6	100.3	Ave.: 100.5						Ave.:				100.3	99.9	Ave.: 100.1										
Turbidity (NTU)	:	5.13	5.10	Ave.: 5.12						Ave.:				4.88	4.94	Ave.: 4.91				5.02	✓	27.5 and 120% of CS4	5.78	47.0 and 130% of CS4	6.27	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 10:52 to 11:07 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 8.48 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.4						9.8												
Temp. (°C)	:	25.7	25.7	Ave.: 25.7				25.7	25.7	25.7				25.6	25.6	Ave.: 25.6										
pH	:	7.70	7.71	Ave.: 7.71				7.15	7.14	7.75				7.75	7.75	Ave.: 7.75										
Salinity (ppt)	:	25.1	25.1	Ave.: 25.1				25.2	25.2	Ave.: 25.2				25.3	25.3	Ave.: 25.3										
D.O. (mg/L)	:	6.89	6.85	Ave.: 6.87	5.0	4.2	✓	6.88	6.84	Ave.: 6.86	5.0	4.2	✓	6.66	6.64	Ave.: 6.65	4.7	2.0	✓							
D.O.S. (%)	:	97.4	96.9	Ave.: 97.2				96.9	96.4	Ave.: 96.7				94.1	93.8	Ave.: 94.0										
Turbidity (NTU)	:	6.10	6.03	Ave.: 6.07				5.56	5.52	Ave.: 5.54				5.60	5.54	Ave.: 5.57				5.73	✓	27.5 and 120% of CS4	5.78	47.0 and 130% of CS4	6.27	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 10:32 to 10:47 Depth of Water (meter): 11.6 Wet bulb calibration for DO meter: 8.42 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.8						10.6												
Temp. (°C)	:	25.6	25.7	Ave.: 25.7				25.7	25.7	25.7				25.6	25.6	Ave.: 25.6										
pH	:	7.69	7.70	Ave.: 7.70				7.72	7.72	7.72				7.74	7.74	Ave.: 7.74										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0										
D.O. (mg/L)	:	7.22	7.25	Ave.: 7.24	5.0	4.2	✓	7.37	7.40	Ave.: 7.39	5.0	4.2	✓	7.32	7.35	Ave.: 7.34	4.7	2.0	✓							
D.O.S. (%)	:	101.9	102.4	Ave.: 102.2				104.0	104.4	Ave.: 104.2				103.3	103.7	Ave.: 103.5										
Turbidity (NTU)	:	4.89	4.93	Ave.: 4.91				4.72	4.75	Ave.: 4.74				6.07	6.09	Ave.: 6.08				5.24	✓	27.5 and 120% of CS4	5.78	47.0 and 130% of CS4	6.27	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

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Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: IS12 Duration: 10:12 to 10:27 Depth of Water (meter): 15.0 Wet bulb calibration for DO meter: 8.45 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.5						14.0												
Temp. (°C)	:	25.6	25.6	Ave.: 25.6				25.6	25.6	25.6				25.6	25.6	Ave.: 25.6										
pH	:	7.60	7.61	Ave.: 7.61				7.64	7.64	7.64				7.68	7.68	Ave.: 7.68										
Salinity (ppt)	:	24.8	24.7	Ave.: 24.8				24.9	24.9	Ave.: 24.9				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	7.76	7.73	Ave.: 7.75	5.0	4.2	✓	7.34	7.36	Ave.: 7.35	5.0	4.2	✓	7.32	7.29	Ave.: 7.31	4.7	2.0	✓							
D.O.S. (%)	:	109.4	109.0	Ave.: 109.2				103.5	103.8	Ave.: 103.7				103.2	102.8	Ave.: 103.0										
Turbidity (NTU)	:	4.38	4.35	Ave.: 4.37				3.34	3.30	Ave.: 3.32				4.28	4.22	Ave.: 4.25				3.98	✓	27.5 and 120% of CS4	5.78	47.0 and 130% of CS4	6.27	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 9:52 to 10:08 Depth of Water (meter): 17.6 Wet bulb calibration for DO meter: 8.38 mg/L (100.0 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.8						16.6												
Temp. (°C)	:	25.7	25.7	Ave.: 25.7				25.6	25.6	25.6				25.6	25.6	Ave.: 25.6										
pH	:	7.59	7.58	Ave.: 7.59				7.64	7.64	7.64				7.65	7.64	Ave.: 7.65										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0				25.2	25.2	Ave.: 25.2				25.4	25.4	Ave.: 25.4										
D.O. (mg/L)	:	7.36	7.40	Ave.: 7.38	5.0	4.2	✓	7.17	7.19	Ave.: 7.18	5.0	4.2	✓	6.81	6.85	Ave.: 6.83	4.7	2.0	✓							
D.O.S. (%)	:	103.8	104.4	Ave.: 104.1				101.4	101.7	Ave.: 101.6				96.2	96.8	Ave.: 96.5										
Turbidity (NTU)	:	4.01	4.05	Ave.: 4.03				4.37	4.35	Ave.: 4.36				3.84	3.80	Ave.: 3.82				4.07	✓	27.5 and 120% of CS4	5.78	47.0 and 130% of CS4	6.27	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 9:30 to 9:47 Depth of Water (meter): 22.0 Wet bulb calibration for DO meter: 8.46 mg/L (99.9 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.0			21.0					
Temp. (°C)	:	25.4	25.4	Ave.: 25.4	25.6	25.6	Ave.: 25.6	25.6	25.6	Ave.: 25.6			
pH	:	7.48	7.47	Ave.: 7.48	7.52	7.51	Ave.: 7.52	750	7.50	Ave.: 7.50			
Salinity (ppt)	:	23.0	23.0	Ave.: 23.0	24.6	24.5	Ave.: 24.6	24.8	24.8	Ave.: 24.8			
D.O. (mg/L)	:	8.29	8.25	Ave.: 8.27	7.55	7.58	Ave.: 7.57	7.40	7.37	Ave.: 7.49			
D.O.S. (%)	:	114.6	114.1	Ave.: 114.4	106.1	106.6	Ave.: 106.4	104.1	103.7	Ave.: 103.9		120%	130%
Turbidity (NTU)	:	4.04	4.09	Ave.: 4.07	4.49	4.56	Ave.: 4.53	5.89	5.85	Ave.: 5.87	4.82	5.78	6.27
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: ______

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : ______

Field Operator	Mak Kai Wai	Checked by		Laboratory Staff		Checked by	
Date		Date		Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 1-11-2013 Weather Condition : Fine Ambient Temperature (°C) : 26 Sea Conditions: Calm / [✓ Small Wave] / Great Wave Tide Mode: Flood Tide Direction of water current: From CS6 to CS4

Station: CS6 (Upstream Control Station) Duration: 15:32 to 15:47 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 8.39 mg/L (99.9 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			5.4			9.8					
Temp. (°C)	:	26.1	26.1	Ave.: 26.1	25.9	25.9	Ave.: 25.9	25.8	25.9	Ave.: 25.9			
pH	:	7.75	7.75	Ave.: 7.75	7.72	7.72	Ave.: 7.72	7.74	7.74	Ave.: 7.74			
Salinity (ppt)	:	24.8	24.8	Ave.: 24.8	25.0	24.9	Ave.: ~~24.9~~ 25.0	25.1	25.0	Ave.: 25.1			
D.O. (mg/L)	:	8.40	8.38	Ave.: 8.39	7.74	7.76	Ave.: 7.75	7.64	7.60	Ave.: 7.62			
D.O.S. (%)	:	118.9	118.6	Ave.: 118.8	109.5	109.8	Ave.: 109.7	108.1	107.6	Ave.: 107.9		120%	130%
Turbidity (NTU)	:	7.72	7.76	Ave.: 7.74	7.24	7.28	Ave.: 7.26	7.40	7.48	Ave.: 7.44	7.48	8.98	9.72
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) Duration: 16:02 to 16:17 Depth of Water (meter): 12.8 Wet bulb calibration for DO meter: 8.40 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.4						11.8												
Temp. (°C)	:	26.0	26.1	Ave.: 26.1				25.9	25.9	25.9				25.9	25.9	Ave.: 25.9										
pH	:	7.73	7.73	Ave.: 7.73				7.69	7.69	7.69				7.60	7.60	Ave.: 7.60										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9				25.0	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0										
D.O. (mg/L)	:	8.54	8.50	Ave.: 8.52	5.0	5.0	√	8.08	8.10	Ave.: 8.09	5.0	5.0	√	8.12	8.14	Ave.: 8.13	4.7	2.0	√							
D.O.S. (%)	:	120.9	120.3	Ave.: 120.6				114.4	114.7	Ave.: 114.6				114.9	115.2	Ave.: 115.1										
Turbidity (NTU)	:	4.50	4.47	Ave.: 4.49				4.04	4.06	Ave.: 4.05				3.84	3.80	Ave.: 3.82				4.12	√	27.5 and 120% of CS6	8.98	47.0 and 130% of CS6	9.72	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 Duration: 16:52 to 17:06 Depth of Water (meter): 4.8 Wet bulb calibration for DO meter: 8.41 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.8												
Temp. (°C)	:	26.1	26.1	Ave.: 26.1										26.0	26.0	Ave.: 26.0										
pH	:	7.70	7.71	Ave.: 7.71										7.68	7.68	Ave.: 7.68										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0						Ave.:				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	8.36	8.34	Ave.: 8.35	5.0	4.2	√			Ave.:	5.0	4.2		8.11	8.13	Ave.: 8.14	4.7	2.0	√							
D.O.S. (%)	:	118.3	118.1	Ave.: 118.2						Ave.:				114.8	115.1	Ave.: 115.0										
Turbidity (NTU)	:	4.86	4.90	Ave.: 4.88						Ave.:				4.70	4.79	Ave.: 4.75				4.82	√	27.5 and 120% of CS6	8.98	47.0 and 130% of CS6	9.72	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 Duration: 17:16 to 17:31 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 8.39 mg/L (98.3 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	26.0	26.0	Ave.: 26.0										26.0	25.9	Ave.: 26.0										
pH	:	7.76	7.76	Ave.: 7.76										7.74	7.74	Ave.: 7.74										
Salinity (ppt)	:	25.1	25.1	Ave.: 25.1						Ave.:				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	8.40	8.34	Ave.: 8.37	5.0	4.2	✓			Ave.:	5.0	4.2		8.39	8.38	Ave.: 8.39	4.7	2.0	✓							
D.O.S. (%)	:	119.0	118.3	Ave.: 118.7						Ave.:				118.8	118.6	Ave.: 118.7										
Turbidity (NTU)	:	4.58	4.60	Ave.: 4.59						Ave.:				4.85	4.88	Ave.: 4.87				4.73	✓	27.5 and 120% of CS6	8.98	47.0 and 130% of CS6	9.72	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 17:36 to 17:51 Depth of Water (meter): 11.2 Wet bulb calibration for DO meter: 8.42 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.6						10.2												
Temp. (°C)	:	26.0	26.0	Ave.: 26.0				25.9	25.9	25.9				25.9	25.9	Ave.: 25.9										
pH	:	7.72	7.72	Ave.: 7.72				7.71	7.71	7.71				7.74	7.74	Ave.: 7.74										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0				25.0	25.1	Ave.: 25.1										
D.O. (mg/L)	:	7.75	7.76	Ave.: 7.76	5.0	4.2	✓	7.57	7.55	Ave.: 7.56	5.0	4.2	✓	7.60	7.55	Ave.: 7.58	4.7	2.0	✓							
D.O.S. (%)	:	109.1	110.0	Ave.: 109.6				107.3	107.0	Ave.: 107.2				107.8	106.7	Ave.: 107.3										
Turbidity (NTU)	:	4.82	4.80	Ave.: 4.81				5.78	5.76	Ave.: 5.77				7.15	7.10	Ave.: 7.13				5.90	✓	27.5 and 120% of CS6	8.98	47.0 and 130% of CS6	9.72	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 17:56 to 18:11 Depth of Water (meter): 11.8 Wet bulb calibration for DO meter: 8.43 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.9						10.8												
Temp. (°C)	:	26.2	26.1	Ave.: 26.2				26.0	26.0	26.0				25.9	25.9	Ave.: 25.9										
pH	:	7.70	7.71	Ave.: 7.71				7.73	7.73	7.73				7.76	7.76	Ave.: 7.76										
Salinity (ppt)	:	24.5	24.5	Ave.: 24.5				24.6	24.6	Ave.: 24.6				24.6	24.7	Ave.: 24.7										
D.O. (mg/L)	:	8.20	8.22	Ave.: 8.21	5.0	4.2	✓	8.01	8.06	Ave.: 8.04	5.0	4.2	✓	7.92	7.94	Ave.: 7.93	4.7	2.0	✓							
D.O.S. (%)	:	116.6	116.9	Ave.: 116.8				113.3	113.8	Ave.: 113.6				112.0	112.6	Ave.: 112.3										
Turbidity (NTU)	:	4.87	4.88	Ave.: 4.88				5.08	5.12	Ave.: 5.10				6.71	6.75	Ave.: 6.73				5.57	✓	27.5 and 120% of CS6	8.98	47.0 and 130% of CS6	9.72	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 18:16 to 18:30 Depth of Water (meter): 15.8 Wet bulb calibration for DO meter: 8.48 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.9						14.8												
Temp. (°C)	:	25.9	25.9	Ave.: 25.9				25.8	25.8	25.8				25.8	25.7	Ave.: 25.8										
pH	:	7.69	7.68	Ave.: 7.69				7.59	7.60	7.60				7.70	7.71	Ave.: 7.71										
Salinity (ppt)	:	24.3	24.4	Ave.: 24.4				24.3	24.3	Ave.: 24.3				24.4	24.4	Ave.: 24.4										
D.O. (mg/L)	:	8.03	8.05	Ave.: 8.04	5.0	4.2	✓	8.01	8.04	Ave.: 8.03	5.0	4.2	✓	8.00	7.96	Ave.: 7.98	4.7	2.0	✓							
D.O.S. (%)	:	113.8	114.0	Ave.: 113.9				113.1	113.9	Ave.: 113.5				113.0	112.4	Ave.: 112.7										
Turbidity (NTU)	:	4.91	4.93	Ave.: 4.92				6.83	6.82	Ave.: 6.83				7.06	7.10	Ave.: 7.08				6.28	✓	27.5 and 120% of CS6	8.98	47.0 and 130% of CS6	9.72	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 18:34 to 18:49 Depth of Water (meter): 18.4 Wet bulb calibration for DO meter: 8.39 mg/L (99.9 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						9.2						17.4												
Temp. (°C)	:	26.0	26.0	Ave.: 26.0				26.0	26.0	26.0				25.9	25.9	Ave.: 25.9										
pH	:	7.70	7.70	Ave.: 7.70				7.78	7.77	7.78				7.94	7.95	Ave.: 7.95										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9				25.0	25.1	Ave.: 25.1				25.2	25.2	Ave.: 25.2										
D.O. (mg/L)	:	7.42	7.48	Ave.: 7.45	5.0	4.2	✓	7.02	7.09	Ave.: 7.06	5.0	4.2	✓	7.13	7.18	Ave.: 7.16	4.7	2.0	✓							
D.O.S. (%)	:	105.9	106.3	Ave.: 106.1				99.6	100.5	Ave.: 100.1				101.0	101.8	Ave.: 101.4										
Turbidity (NTU)	:	6.62	6.66	Ave.: 6.64				5.92	5.97	Ave.: 5.95				7.04	7.08	Ave.: 7.06				6.55	✓	27.5 and 120% of CS6	8.98	47.0 and 130% of CS6	9.72	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 18:53 to 19:02 Depth of Water (meter): 22.4 Wet bulb calibration for DO meter: 8.20 mg/L (100 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.2			21.4				
Temp. (°C)	:	26.2	26.1	Ave.: 26.2	26.3	26.3	Ave.: 26.3	26.3	26.3	Ave.: 26.3		
pH	:	7.72	7.71	Ave.: 7.72	7.68	7.69	Ave.: 7.69	7.90	7.91	Ave.: 7.91		
Salinity (ppt)	:	23.2	23.3	Ave.: 23.3	23.9	23.9	Ave.: 23.9	23.9	23.9	Ave.: 23.9		
D.O. (mg/L)	:	8.42	8.43	Ave.: 8.43	7.83	7.81	Ave.: 7.82	7.74	7.72	Ave.: 7.73		
D.O.S. (%)	:	118.7	118.8	Ave.: 118.7	110.7	110.2	Ave.: 110.5	109.6	109.4	Ave.: 109.5		
Turbidity (NTU)	:	4.77	4.79	Ave.: 4.78	5.18	5.12	Ave.: 5.15	5.82	5.86	Ave.: 5.84	5.26	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? ~~Y~~ / [✓ N] If yes, elaboration is as follows: ______

Any notable pollutant by others near monitoring site ? ~~Y~~ / [✓ N] If yes, elaboration is as follows : ______

Field Operator	S. H. Lam	Checked by		Laboratory Staff		Checked by	
Date	1-11-2013	Date		Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Conu..ion)**

Sampling Date : 4-11-2013 *Weather Condition :* cloudy *Ambient Temperature (°C) :* 25 *Sea Conditions: Calm / [✓ Small Wave] / Great Wave* *Tide Mode: Ebb Tide* *Direction of water current: From CS4 to CS6*

Station: ~~CS6~~ CS6 *Duration:* 14:15 *to* 14:30 *Depth of Water (meter):* 11.4 *Wet bulb calibration for DO meter:* 8.31 *mg/L (* 99.3 *%)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			5.7			10.4				
Temp. (°C)	:	25.4	25.4	Ave.: 25.4	25.4	25.4	Ave.: 25.4	25.4	25.4	Ave.: 25.4		
pH	:	7.61	7.55	Ave.: 7.58	7.44	7.48	Ave.: 7.46	7.24	7.27	Ave.: 7.26		
Salinity (ppt)	:	25.8	25.7	Ave.: 25.8	25.8	25.8	Ave.: 25.8	25.9	25.9	Ave.: 25.9		
D.O. (mg/L)	:	6.34	6.28	Ave.: 6.31	6.22	6.24	Ave.: 6.23	6.14	6.13	Ave.: 6.14		
D.O.S. (%)	:	89.1	88.4	Ave.: 88.8	87.6	88.0	Ave.: 87.8	85.4	85.2	Ave.: 85.3		
Turbidity (NTU)	:	9.73	8.81	Ave.: 9.27	6.92	5.56	Ave.: 6.24	4.36	5.03	Ave.: 4.70	6.74	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) *Duration:* 14:45 *to* 15:00 *Depth of Water (meter):* 12.6 *Wet bulb calibration for DO meter:* 8.28 *mg/L (* 99.5 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.3						11.6												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4				25.4	25.4	25.4				25.3	25.3	Ave.: 25.3										
pH	:	6.68	6.72	Ave.: 6.70				6.71	6.75	6.73				6.83	6.85	Ave.: 6.84										
Salinity (ppt)	:	25.8	25.9	Ave.: 25.9				26.1	26.1	Ave.: 26.1				26.1	26.2	Ave.: 26.2										
D.O. (mg/L)	:	5.99	5.96	Ave.: 5.98	5.0	5.0	✓	5.98	6.03	Ave.: 6.01	5.0	5.0	✓	5.90	5.88	Ave.: 5.89	4.7	2.0	✓							
D.O.S. (%)	:	84.7	84.2	Ave.: 84.5				84.6	85.3	Ave.: 85.0				83.4	83.1	Ave.: 83.3										
Turbidity (NTU)	:	4.96	6.23	Ave.: 5.60				4.62	4.93	Ave.: 4.78				5.06	4.94	Ave.: 5.00				5.13	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 *Duration:* 14:03 *to* 14:17 *Depth of Water (meter):* 4.6 *Wet bulb calibration for DO meter:* 8.33 *mg/L (* 99.7 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.6												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4										25.4	25.4	Ave.: 25.4										
pH	:	7.76	7.77	Ave.: 7.77										7.67	7.68	Ave.: 7.68										
Salinity (ppt)	:	25.6	25.6	Ave.: 25.6						Ave.:				25.6	25.6	Ave.: 25.6										
D.O. (mg/L)	:	6.36	6.34	Ave.: 6.35	5.0	4.2	✓			Ave.:	5.0	4.2		6.45	6.47	Ave.: 6.46	4.7	2.0	✓							
D.O.S. (%)	:	89.7	89.3	Ave.: 89.5						Ave.:				90.8	91.1	Ave.: 91.0										
Turbidity (NTU)	:	5.78	5.48	Ave.: 5.63						Ave.:				4.63	4.43	Ave.: 4.53				5.08	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Cor tion)**

Station: SR9 Duration: 13:36 to 13:51 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 8.34 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.6												4.8												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4										25.4	25.4	Ave.: 25.4										
pH	:	8.34	8.36	Ave.: 8.35										8.45	8.42	Ave.: 8.44										
Salinity (ppt)	:	25.6	25.6	Ave.: 25.6						Ave.:				25.7	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.68	6.63	Ave.: 6.66	5.0	4.2	✓			Ave.:	5.0	4.2		6.41	6.39	Ave.: 6.40	4.7	2.0	✓							
D.O.S. (%)	:	93.8	93.2	Ave.: 93.5						Ave.:				90.2	89.8	Ave.: 93.2										
Turbidity (NTU)	:	3.66	3.59	Ave.: 3.63						Ave.:				3.65	3.64	Ave.: 3.65				3.64	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 13:14 to 13:30 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 8.31 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.4						9.8												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4				25.4	25.4	25.4				25.4	25.3	Ave.: 25.4										
pH	:	8.25	8.27	Ave.: 8.26				8.30	8.27	8.29				8.34	8.33	Ave.: 8.34										
Salinity (ppt)	:	25.6	25.6	Ave.: 25.6				25.6	25.6	Ave.: 25.6				25.6	25.6	Ave.: 25.6										
D.O. (mg/L)	:	6.50	6.47	Ave.: 6.49	5.0	4.2	✓	6.43	6.45	Ave.: 6.44	5.0	4.2	✓	6.37	6.39	Ave.: 6.38	4.7	2.0	✓							
D.O.S. (%)	:	91.9	91.4	Ave.: 91.7				90.9	91.1	Ave.: 91.0				89.9	90.2	Ave.: 90.1										
Turbidity (NTU)	:	4.91	4.09	Ave.: 4.50				4.73	5.08	Ave.: 4.91				3.55	3.26	Ave.: 3.41				4.27	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 12:50 to 13:07 Depth of Water (meter): 11.2 Wet bulb calibration for DO meter: 8.30 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.6						10.2												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4				25.4	25.4	25.4				25.4	25.3	Ave.: 25.4										
pH	:	8.02	8.04	Ave.: 8.03				8.14	8.19	8.17				8.23	8.27	Ave.: 8.25										
Salinity (ppt)	:	25.6	25.6	Ave.: 25.6				25.6	25.6	Ave.: 25.6				25.6	25.7	Ave.: 25.7										
D.O. (mg/L)	:	6.49	6.51	Ave.: 6.50	5.0	4.2	✓	6.41	6.39	Ave.: 6.40	5.0	4.2	✓	6.30	6.28	Ave.: 6.29	4.7	2.0	✓							
D.O.S. (%)	:	91.7	92.0	Ave.: 91.9				90.8	90.2	Ave.: 90.5				88.8	88.4	Ave.: 88.6										
Turbidity (NTU)	:	3.22	3.44	Ave.: 3.33				4.09	3.74	Ave.: 3.92				3.32	4.79	Ave.: 4.06				3.77	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: IS12 Duration: 12:27 to 12:43 Depth of Water (meter): 14.6 Wet bulb calibration for DO meter: 8.41 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.3						13.6												
Temp. (°C)	:	25.4	25.4	Ave. 25.4				25.4	25.4	25.4				25.4	25.4	Ave. 25.4										
pH	:	8.38	8.35	Ave. 8.37				8.41	8.44	8.43				8.43	8.44	Ave.: 8.44										
Salinity (ppt)	:	25.6	25.6	Ave.: 25.6				25.6	25.7	Ave. 25.7				25.7	25.7	Ave.: 25.7										
D.O. (mg/L)	:	6.46	6.49	Ave.: 6.48	5.0	4.2	✓	6.52	6.50	Ave. 6.51	5.0	4.2	✓	6.40	6.42	Ave.: 6.41	4.7	2.0	✓							
D.O.S. (%)	:	91.0	91.6	Ave.: 91.3				91.9	91.5	Ave.: 91.7				90.4	90.7	Ave.: 90.6										
Turbidity (NTU)	:	3.57	3.56	Ave. 3.57				3.23	3.71	Ave. 3.47				2.14	4.68	Ave.: 3.91				3.65	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 12:03 to 12:20 Depth of Water (meter): 16.8 Wet bulb calibration for DO meter: 8.38 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.4						15.8												
Temp. (°C)	:	25.4	25.5	Ave.: 25.5				25.5	25.5	25.5				25.5	25.4	Ave.: 25.4										
pH	:	8.43	8.40	Ave. 8.42				8.44	8.45	8.45				8.41	8.43	Ave. 8.42										
Salinity (ppt)	:	25.7	25.7	Ave.: 25.7				25.7	25.8	Ave.: 25.8				25.7	25.6	Ave.: 25.7										
D.O. (mg/L)	:	6.19	6.23	Ave.: 6.21	5.0	4.2	✓	6.27	6.24	Ave. 6.26	5.0	4.2	✓	6.22	6.25	Ave.: 6.24	4.7	2.0	✓							
D.O.S. (%)	:	87.1	87.5	Ave. 87.3				88.1	87.7	Ave. 87.9				87.4	87.8	Ave.: 87.6										
Turbidity (NTU)	:	5.41	4.64	Ave. 4.94				5.26	4.99	Ave. 5.12				2.94	4.87	Ave. 4.41				4.82	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 11:40 to 11:55 Depth of Water (meter): 21.4 Wet bulb calibration for DO meter: 8.31 mg/L (99.6 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			10.7			20.4					
Temp. (°C)	:	25.7	25.8	Ave.: 25.8	25.7	25.7	Ave.: 25.7	25.1	25.6	Ave.: 25.6			
pH	:	8.39	8.41	Ave.: 8.40	8.43	8.40	Ave.: 8.42	8.47	8.45	Ave.: 8.46			
Salinity (ppt)	:	25.3	25.3	Ave.: 25.3	25.3	25.4	Ave.: 25.4	25.5	25.5	Ave.: 25.5			
D.O. (mg/L)	:	6.65	6.70	Ave.: 6.68	6.63	6.57	Ave.: 6.60	6.50	6.46	Ave.: 6.48			
D.O.S. (%)	:	93.8	94.6	Ave.: 94.2	93.6	92.8	Ave.: 93.2	91.7	91.2	Ave.: 91.5		120%	130%
Turbidity (NTU)	:	6.40	6.63	Ave.: 6.52	6.51	7.30	Ave.: 6.91	7.29	8.80	Ave.: 8.05	7.16	8.59	9.31
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: ______

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : ______

Field Operator	K. Kwan	Checked by		Laboratory Staff		Checked by	
Date	4-11-2013	Date	4/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 4.11.2013 Weather Condition : Drizzle Ambient Temperature (°C) : 25 Sea Conditions: ~~Calm~~ / Small Wave / ~~Great Wave~~ Tide Mode: Flood Tide Direction of water current: From CS6 to CS4

Station: CS6 (Upstream Control Station) Duration: 17:08 to 17:23 Depth of Water (meter): 11.8 Wet bulb calibration for DO meter: 8.31 mg/L (99.3 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			5.9			10.8					
Temp. (°C)	:	25.5	25.6	Ave.: 25.6	25.5	25.4	Ave.: 25.5	25.3	25.4	Ave.: 25.4			
pH	:	7.64	7.58	Ave.: 7.61	7.47	7.52	Ave.: 7.50	7.27	7.30	Ave.: 7.29			
Salinity (ppt)	:	25.7	25.8	Ave.: 25.8	25.9	25.8	Ave.: 25.8	25.8	25.9	Ave.: 25.9			
D.O. (mg/L)	:	6.43	6.37	Ave.: 6.40	6.31	6.33	Ave.: 6.32	6.23	6.22	Ave.: 6.23			
D.O.S. (%)	:	90.4	89.7	Ave.: 90.1	88.9	89.3	Ave.: 89.1	86.6	86.5	Ave.: 86.6		120%	130%
Turbidity (NTU)	:	8.68	8.61	Ave.: 8.65	8.15	7.99	Ave.: 8.07	9.05	9.18	Ave.: 9.12	8.61	10.3	11.2
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) Duration: 17:38 to 17:53 Depth of Water (meter): 13.2 Wet bulb calibration for DO meter: 8.28 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.6						12.2												
Temp. (°C)	:	25.5	25.4	Ave.: 25.5				25.5	25.5	25.5				25.4	25.3	Ave.: 25.4										
pH	:	6.69	6.74	Ave.: 6.72				6.76	6.79	6.77				6.84	6.87	Ave.: 6.86										
Salinity (ppt)	:	25.9	25.9	Ave.: 25.9				26.1	26.0	Ave.: 26.1				26.2	26.3	Ave.: 26.3										
D.O. (mg/L)	:	6.08	6.05	Ave.: 6.07	5.0	5.0	✓	6.07	6.12	Ave.: 6.10	5.0	5.0	✓	5.99	5.97	Ave.: 5.98	4.7	2.0	✓							
D.O.S. (%)	:	86.0	85.5	Ave.: 85.8				85.8	86.7	Ave.: 86.3				84.8	84.4	Ave.: 84.6										
Turbidity (NTU)	:	7.97	7.83	Ave.: 7.90				8.58	8.41	Ave.: 8.50				8.90	9.32	Ave.: 9.11				8.50	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 Duration: 18:01 to 18:16 Depth of Water (meter): 4.8 Wet bulb calibration for DO meter: 8.33 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.8												
Temp. (°C)	:	25.6	25.5	Ave.: 25.6										25.6	25.4	Ave.: 25.5										
pH	:	7.78	7.80	Ave.: 7.79										7.70	7.73	Ave.: 7.72										
Salinity (ppt)	:	25.7	25.6	Ave.: 25.7						Ave.:				25.7	25.7	Ave.: 25.7										
D.O. (mg/L)	:	6.45	6.43	Ave.: 6.44	5.0	4.2	✓			Ave.:	5.0	4.2		6.54	6.56	Ave.: 6.55	4.7	2.0	✓							
D.O.S. (%)	:	91.0	90.6	Ave.: 90.8						Ave.:				92.1	92.4	Ave.: 92.3										
Turbidity (NTU)	:	7.64	7.51	Ave.: 7.58						Ave.:				8.65	8.29	Ave.: 8.47				8.03	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

uen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 Duration: 18:31 to 18:43 Depth of Water (meter): 6.4 Wet bulb calibration for DO meter: 8.34 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												5.4												
Temp. (°C)	:	25.5	25.4	Ave.: 25.5										25.5	25.5	Ave.: 25.5										
pH	:	8.37	8.38	Ave.: 8.38										8.47	8.44	Ave.: 8.46										
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7						Ave.:				25.8	25.9	Ave.: 25.9										
D.O. (mg/L)	:	6.77	6.72	Ave.: 6.75	5.0	4.2	✓			Ave.:	5.0	4.2		6.50	6.48	Ave.: 6.51	4.7	2.0	✓							
D.O.S. (%)	:	95.1	94.3	Ave.: 94.7						Ave.:				91.5	91.0	Ave.: 91.3										
Turbidity (NTU)	:	7.99	7.91	Ave.: 7.95						Ave.:				8.46	8.65	Ave.: 8.56				8.25	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 18:53 to 19:07 Depth of Water (meter): 11.2 Wet bulb calibration for DO meter: 8.31 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.6						10.2												
Temp. (°C)	:	25.5	25.5	Ave.: 25.5				25.5	25.4	25.4				25.3	25.4	Ave.: 25.4										
pH	:	8.27	8.29	Ave.: 8.28				8.33	8.31	8.32				8.36	8.35	Ave.: 8.36										
Salinity (ppt)	:	25.7	25.6	Ave.: 25.7				25.7	25.7	Ave.: 25.7				25.7	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.59	6.56	Ave.: 6.58	5.0	4.2	✓	6.52	6.54	Ave.: 6.53	5.0	4.2	✓	6.46	6.48	Ave.: 6.47	4.7	2.0								
D.O.S. (%)	:	93.2	92.8	Ave.: 93.0				92.2	92.4	Ave.: 92.3				91.2	91.6	Ave.: 91.4										
Turbidity (NTU)	:	7.72	8.08	Ave.: 7.90				8.49	8.45	Ave.: 8.47				9.42	8.99	Ave.: 9.21				8.53	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 19:21 to 19:34 Depth of Water (meter): 11.6 Wet bulb calibration for DO meter: 8.30 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.8						10.6												
Temp. (°C)	:	25.4	25.5	Ave.: 25.5				25.5	25.4	25.5				25.3	25.3	Ave.: 25.3										
pH	:	8.05	8.07	Ave.: 8.06				8.17	8.22	8.20				8.26	8.30	Ave.: 8.28										
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7				25.7	25.7	Ave.: 25.7				25.8	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.58	6.60	Ave.: 6.59	5.0	4.2	✓	6.50	6.48	Ave.: 6.49	5.0	4.2	✓	6.39	6.37	Ave.: 6.38	4.7	2.0	✓							
D.O.S. (%)	:	93.0	93.3	Ave.: 93.2				92.2	91.6	Ave.: 91.9				90.2	89.8	Ave.: 90.0										
Turbidity (NTU)	:	7.74	7.97	Ave.: 7.86				7.67	7.35	Ave.: 7.51				8.85	8.71	Ave.: 8.78				8.05	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 19:48 to 20:03 Depth of Water (meter): 15.2 Wet bulb calibration for DO meter: 8.41 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.6						14.2												
Temp. (°C)	:	25.4	25.5	Ave.: 25.5				25.5	25.5	25.5				25.4	25.3	Ave.: 25.4										
pH	:	8.40	8.37	Ave.: 8.39				8.44	8.45	8.45				8.45	8.47	Ave.: 8.46										
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7				25.7	25.8	Ave.: 25.8				25.8	25.7	Ave.: 25.8										
D.O. (mg/L)	:	6.55	6.58	Ave.: 6.57	5.0	4.2	✓	6.61	6.59	Ave.: 6.60	5.0	4.2	✓	6.49	6.51	Ave.: 6.50	4.7	2.0	✓							
D.O.S. (%)	:	92.2	92.9	Ave.: 92.6				93.2	92.9	Ave.: 93.1				91.7	92.0	Ave.: 91.9										
Turbidity (NTU)	:	7.88	8.10	Ave.: 7.99				8.51	8.71	Ave.: 8.61				8.11	8.75	Ave.: 8.43				8.34	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 20:10 to 20:14 Depth of Water (meter): 17.2 Wet bulb calibration for DO meter: 8.38 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.6						16.2												
Temp. (°C)	:	25.6	25.5	Ave.: 25.6				25.5	25.6	25.6				25.5	25.5	Ave.: 25.5										
pH	:	8.45	8.42	Ave.: 8.44				8.48	8.47	8.48				8.42	8.44	Ave.: 8.43										
Salinity (ppt)	:	25.7	25.6	Ave.: 25.7				25.8	25.8	Ave.: 25.8				25.8	25.7	Ave.: 25.8										
D.O. (mg/L)	:	6.28	6.32	Ave.: 6.30	5.0	4.2	✓	6.36	6.33	Ave.: 6.35	5.0	4.2		6.31	6.34	Ave.: 6.33	4.7	2.0	✓							
D.O.S. (%)	:	88.4	88.8	Ave.: 88.6				89.4	88.9	Ave.: 88.7				88.7	89.1	Ave.: 87.6										
Turbidity (NTU)	:	9.70	8.75	Ave.: 9.23				8.99	9.18	Ave.: 9.09				8.22	8.15	Ave.: 8.19				8.83	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 20:21 to 20:38 Depth of Water (meter): 21.8 Wet bulb calibration for DO meter: 8.34 mg/L (99.6 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			10.9			20.8				
Temp. (°C)	:	25.7	25.7	Ave.: 25.7	25.6	25.5	Ave.: 25.6	25.4	25.5	Ave.: 25.5		
pH	:	8.42	8.46	Ave.: 8.44	8.48	8.45	Ave.: 8.47	8.50	8.49	Ave.: 8.50		
Salinity (ppt)	:	25.3	25.4	Ave.: 25.4	25.4	25.5	Ave.: 25.5	25.5	25.6	Ave.: 25.6		
D.O. (mg/L)	:	6.74	6.78	Ave.: 6.76	6.72	6.66	Ave.: 6.69	6.59	6.55	Ave.: 6.57		
D.O.S. (%)	:	95.2	95.7	Ave.: 95.5	95.0	94.1	Ave.: 94.6	93.1	92.6	Ave.: 92.9		
Turbidity (NTU)	:	6.95	6.74	Ave.: 6.85	6.87	7.18	Ave.: 7.03	6.63	6.52	Ave.: 6.58	6.82	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? ~~Y~~/N If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? ~~Y~~ / N If yes, elaboration is as follows : __________

Field Operator	Jacky Cheung	Checked by		Laboratory Staff		Checked by	
Date	4. 11. 2013	Date	4/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 6.11.2013 Weather Condition : cloudy Ambient Temperature (°C) : 26 Sea Conditions: ~~Calm~~ / Small Wave / ~~Great Wave~~ Tide Mode: Flood Tide Direction of water current: From CS6 to CS4

Station: CS6 (Upstream Control Station) Duration: 07:36 to 07:51 Depth of Water (meter): 12.6 Wet bulb calibration for DO meter: 8.31 mg/L (99.3 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.3			11.6					
Temp. (°C)	:	25.4	25.5	Ave.: 25.5	25.4	25.4	Ave.: 25.4	25.4	25.3	Ave.: 25.4			
pH	:	7.61	7.55	Ave.: 7.58	7.44	7.49	Ave.: 7.47	7.21	7.25	Ave.: 7.23			
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7	25.8	25.7	Ave.: 25.8	25.9	25.9	Ave.: 25.9			
D.O. (mg/L)	:	6.52	6.46	Ave.: 6.49	6.40	6.42	Ave.: 6.41	6.32	6.34	Ave.: 6.33			
D.O.S. (%)	:	91.7	91.0	Ave.: 91.4	90.2	90.5	Ave.: 90.4	87.8	88.1	Ave.: 88.0		120%	130%
Turbidity (NTU)	:	14.6	14.9	Ave.: 14.8	15.1	15.6	Ave.: 15.4	16.5	16.7	Ave.: 16.6	15.2	18.3	19.8
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) Duration: 08:06 to 08:21 Depth of Water (meter): 13.8 Wet bulb calibration for DO meter: 8.28 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.9						12.8												
Temp. (°C)	:	25.4	25.3	Ave.: 25.4				25.4	25.4	25.4				25.3	25.3	Ave.: 25.3										
pH	:	6.62	6.66	Ave.: 6.64				6.71	6.69	6.70				6.88	6.81	Ave.: 6.85										
Salinity (ppt)	:	25.7	25.8	Ave.: 25.8				25.9	25.8	Ave.: 25.9				26.0	26.1	Ave.: 26.1										
D.O. (mg/L)	:	6.17	6.14	Ave.: 6.16	5.0	5.0	✓	6.16	6.21	Ave.: 6.19	5.0	5.0	✓	6.04	6.02	Ave.: 6.03	4.7	2.0	✓							
D.O.S. (%)	:	87.2	86.7	Ave.: 87.0				87.0	87.9	Ave.: 87.5				84.8	86.1	Ave.: 85.0										
Turbidity (NTU)	:	13.3	13.8	Ave.: 13.6				14.2	14.6	Ave.: 14.4				14.9	15.2	Ave.: 15.1				14.3	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 Duration: 08:33 to 08:48 Depth of Water (meter): 4.8 Wet bulb calibration for DO meter: 8.33 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.8												
Temp. (°C)	:	25.5	25.4	Ave.: 25.5										25.3	25.4	Ave.: 25.4										
pH	:	7.72	7.75	Ave.: 7.74										7.65	7.58	Ave.: 7.67										
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7						Ave.:				25.8	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.54	6.50	Ave.: 6.52	5.0	4.2	✓			Ave.:	5.0	4.2		6.63	6.66	Ave.: 6.65	4.7	2.0	✓							
D.O.S. (%)	:	92.2	91.6	Ave.: 91.9						Ave.:				93.4	93.8	Ave.: 93.6										
Turbidity (NTU)	:	14.4	14.6	Ave.: 14.5						Ave.:				15.8	16.3	Ave.: 16.1				15.3	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 Duration: 08:58 to 09:12 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 8.34 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	25.4	25.3	Ave.: 25.4										25.3	25.2	Ave.: 25.3										
pH	:	8.31	8.26	Ave.: 8.29										8.40	8.37	Ave.: 8.39										
Salinity (ppt)	:	25.5	25.6	Ave.: 25.6						Ave.:				25.8	25.7	Ave.: 25.8										
D.O. (mg/L)	:	6.86	6.81	Ave.: 6.84	5.0	4.2	✓			Ave.:	5.0	4.2		6.54	6.49	Ave.: 6.52	4.7	2.0	✓							
D.O.S. (%)	:	96.3	95.5	Ave.: 95.9						Ave.:				92.1	91.1	Ave.: 91.6										
Turbidity (NTU)	:	11.2	10.9	Ave.: 11.1						Ave.:				11.8	11.7	Ave.: 11.8				11.4	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 09:25 to 09:40 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 8.31 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.4						9.8												
Temp. (°C)	:	25.4	25.4	Ave.: 254				254	25.3	25.4				25.2	25.3	Ave.: 25.3										
pH	:	8.19	8.23	Ave.: 8.21				8.30	828	8.29				8.33	8.32	Ave.: 8.33										
Salinity (ppt)	:	25.6	25.5	Ave.: 25.6				25.6	25.5	Ave.: 25.6				25.6	25.7	Ave.: 25.7										
D.O. (mg/L)	:	6.68	6.65	Ave.: 6.67	5.0	4.2	✓	6.61	6.63	Ave.: 6.62	5.0	4.2	✓	6.51	6.53	Ave.: 6.52	4.7	2.0	✓							
D.O.S. (%)	:	94.5	94.1	Ave.: 94.3				93.5	93.7	Ave.: 93.6				91.9	92.3	Ave.: 92.1										
Turbidity (NTU)	:	12.1	12.4	Ave.: 12.3				12.9	13.1	Ave.: 13.0				13.5	13.2	Ave.: 13.4				12.9	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 09:52 to 10:07 Depth of Water (meter): 9.8 Wet bulb calibration for DO meter: 8.30 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.9						8.8												
Temp. (°C)	:	25.4	25.5	Ave.: 25.5				25.4	25.3	25.4				25.3	25.3	Ave.: 25.3										
pH	:	7.99	8.04	Ave.: 8.02				8.11	8.16	8.14				8.19	8.25	Ave.: 8.22										
Salinity (ppt)	:	25.6	25.5	Ave.: 25.6				25.6	25.7	Ave.: 25.7				25.8	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.49	6.51	Ave.: 6.50	5.0	4.2	✓	6.44	6.39	Ave.: 6.42	5.0	4.2	✓	6.30	6.28	Ave.: 6.29	4.7	2.0	✓							
D.O.S. (%)	:	91.7	92.1	Ave.: 91.9				91.3	90.4	Ave.: 90.9				89.0	88.5	Ave.: 88.8										
Turbidity (NTU)	:	9.91	9.89	Ave.: 9.90				9.95	9.99	Ave.: 9.97				10.6	10.8	Ave.: 10.7				10.2	✓	27.5 and 120% of CS6	27.6	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

東業德勤測試顧問有限公司
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Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 10:15 to 10:27 Depth of Water (meter): 14.6 Wet bulb calibration for DO meter: 8.41 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.3						13.6												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4				25.4	25.3	25.4				25.3	25.2	Ave.: 25.2										
pH	:	8.38	8.41	Ave.: 8.40				8.46	8.49	8.48				8.50	8.52	Ave.: 8.51										
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7				25.7	25.7	Ave.: 25.7				25.8	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.60	6.63	Ave.: 6.62	5.0	4.2	✓	6.66	6.64	Ave.: 6.65	5.0	4.2	✓	6.54	6.56	Ave.: 6.55	4.7	2.0	✓							
D.O.S. (%)	:	92.9	93.2	Ave.: 93.1				93.8	93.6	Ave.: 93.7				92.3	92.6	Ave.: 92.5										
Turbidity (NTU)	:	8.99	9.05	Ave.: 9.02				9.11	9.17	Ave.: 9.14				9.28	9.33	Ave.: 9.31				9.16	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 10:34 to 10:46 Depth of Water (meter): 16.6 Wet bulb calibration for DO meter: 8.38 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.3						15.6												
Temp. (°C)	:	25.5	25.4	Ave.: 25.5				25.4	25.4	25.4				25.4	25.3	Ave.: 25.4										
pH	:	8.38	8.44	Ave.: 8.41				8.46	8.45	8.46				8.39	8.36	Ave.: 8.38										
Salinity (ppt)	:	25.6	25.5	Ave.: 25.6				25.7	25.6	Ave.: 25.7				25.7	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.37	6.41	Ave.: 6.39	5.0	4.2	✓	6.45	6.42	Ave.: 6.44	5.0	4.2	✓	6.40	6.43	Ave.: 6.42	4.7	2.0	✓							
D.O.S. (%)	:	89.7	90.1	Ave.: 899				90.7	90.3	Ave.: 90.5				90.0	90.5	Ave.: 90.3										
Turbidity (NTU)	:	9.63	8.82	Ave.: 9.23				9.06	9.15	Ave.: 9.11				8.29	8.22	Ave.: 8.26				8.86	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	27.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 10:52 to 11:06 Depth of Water (meter): 22.8 Wet bulb calibration for DO meter: 8.34 mg/L (99.6 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.4			21.8				
Temp. (°C)	:	25.6	25.5	Ave.: 25.6	25.4	25.5	Ave.: 25.5	25.4	25.4	Ave.: 25.4		
pH	:	8.39	8.43	Ave.: 8.41	8.41	8.45	Ave.: 8.43	8.51	8.48	Ave.: 8.50		
Salinity (ppt)	:	25.4	25.5	Ave.: 25.5	25.5	25.6	Ave.: 25.6	25.7	25.6	Ave.: 25.7		
D.O. (mg/L)	:	6.79	6.83	Ave.: 6.81	6.77	6.71	Ave.: 6.74	6.64	6.60	Ave.: 6.62		
D.O.S. (%)	:	95.8	96.3	Ave.: 96.1	95.6	94.8	Ave.: 95.2	93.7	93.3	Ave.: 93.5		
Turbidity (NTU)	:	9.98	10.2	Ave.: 10.1	10.7	10.5	Ave.: 10.6	10.9	11.1	Ave.: 11.0	10.6	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? ~~Y~~ / N If yes, elaboration is as follows: ______

Any notable pollutant by others near monitoring site ? ~~Y~~ / N If yes, elaboration is as follows : ______

Field Operator	Tody Chang / Laung	Checked by		Laboratory Staff		Checked by	
Date	6.11.2013	Date	6/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 6.11.2013 Weather Condition : cloudy Ambient Temperature (°C) : 26 Sea Conditions: ~~Calm~~ / Small Wave / ~~Great Wave~~ Tide Mode: Ebb Tide Direction of water current: From CS4 to CS6

Station: CS6 Duration: 16:17 to 16:39 Depth of Water (meter): 12.2 Wet bulb calibration for DO meter: 8.31 mg/L (99.3 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.1			11.2				
Temp. (°C)	:	25.6	25.6	Ave.: 25.6	25.5	25.6	Ave.: 25.6	25.3	25.3	Ave.: 25.3		
pH	:	7.64	7.58	Ave.: 7.61	7.46	7.51	Ave.: 7.49	7.24	7.28	Ave.: 7.26		
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7	25.7	25.8	Ave.: 25.8	25.9	25.8	Ave.: 25.9		
D.O. (mg/L)	:	6.46	6.40	Ave.: 6.43	6.35	6.36	Ave.: 6.36	6.26	6.30	Ave.: 6.28		
D.O.S. (%)	:	90.8	90.1	Ave.: 90.5	89.5	89.9	Ave.: 89.7	87.0	87.5	Ave.: 87.3		
Turbidity (NTU)	:	14.8	15.1	Ave.: 15.0	15.4	15.9	Ave.: 15.7	16.1	16.4	Ave.: 16.3	15.6	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) Duration: 15:53 to 16:02 Depth of Water (meter): 13.4 Wet bulb calibration for DO meter: 8.28 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.7						12.4												
Temp. (°C)	:	25.5	25.4	Ave.: 25.5				25.4	25.5	25.5				25.3	25.2	Ave.: 25.3										
pH	:	6.60	6.63	Ave.: 6.62				6.69	6.73	6.71				6.85	6.80	Ave.: 6.83										
Salinity (ppt)	:	25.7	25.7	Ave.: 25.7				25.7	25.8	Ave.: 25.8				25.9	26.0	Ave.: 26.0										
D.O. (mg/L)	:	6.12	6.09	Ave.: 6.11	5.0	5.0	✓	6.11	6.15	Ave.: 6.13	5.0	5.0	✓	5.98	5.89	Ave.: 5.94	4.7	2.0	✓							
D.O.S. (%)	:	86.5	86.1	Ave.: 86.3				86.3	86.9	Ave.: 86.6				83.9	82.7	Ave.: 83.3										
Turbidity (NTU)	:	13.5	13.9	Ave.: 13.7				14.4	14.6	Ave.: 14.5				15.4	15.8	Ave.: 15.6				14.6	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 Duration: 15:30 to 15:45 Depth of Water (meter): 4.6 Wet bulb calibration for DO meter: 8.33 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.6												
Temp. (°C)	:	25.6	25.5	Ave.: 25.6										25.5	25.5	Ave.: 25.5										
pH	:	7.76	7.79	Ave.: 7.78										7.68	7.72	Ave.: 7.70										
Salinity (ppt)	:	25.7	25.8	Ave.: 25.8						Ave.:				25.9	25.8	Ave.: 25.9										
D.O. (mg/L)	:	6.43	6.44	Ave.: 6.46	5.0	4.2	✓			Ave.:	5.0	4.2		6.57	6.60	Ave.: 6.59	4.7	2.0	✓							
D.O.S. (%)	:	91.2	90.7	Ave.: 91.0						Ave.:				92.6	93.0	Ave.: 92.8										
Turbidity (NTU)	:	14.7	15.0	Ave.: 14.9						Ave.:				15.9	16.1	Ave.: 16.0				15.4	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: SR9 Duration: 15:07 to 15:22 Depth of Water (meter): 5.6 Wet bulb calibration for DO meter: 8.34 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	25.4	25.5	Ave.: 25.5										25.4	25.3	Ave.: 25.4										
pH	:	8.33	8.28	Ave.: 8.31										8.44	8.46	Ave.: 8.45										
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7						Ave.:				25.9	25.9	Ave.: 25.9										
D.O. (mg/L)	:	6.81	6.77	Ave.: 6.79	5.0	4.2	✓			Ave.:	5.0	4.2		6.51	6.45	Ave.: 6.48	4.7	2.0	✓							
D.O.S. (%)	:	95.5	95.1	Ave.: 95.3						Ave.:				91.7	90.9	Ave.: 91.3										
Turbidity (NTU)	:	11.7	11.1	Ave.: 11.4						Ave.:				12.1	11.9	Ave.: 12.0				11.7	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 14:44 to 14:59 Depth of Water (meter): 10.4 Wet bulb calibration for DO meter: 8.31 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.2						9.4												
Temp. (°C)	:	25.5	25.5	Ave.: 25.5				25.3	25.4	25.4				25.4	25.4	Ave.: 25.4										
pH	:	8.21	8.25	Ave.: 8.23				8.35	8.31	8.33				8.37	8.39	Ave.: 8.38										
Salinity (ppt)	:	25.6	25.6	Ave.: 25.6				25.7	25.6	Ave.: 25.7				25.8	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.62	6.59	Ave.: 6.61	5.0	4.2	✓	6.55	6.57	Ave.: 6.56	5.0	4.2	✓	6.49	6.47	Ave.: 6.48	4.7	2.0	✓							
D.O.S. (%)	:	93.5	93.2	Ave.: 93.4				92.6	92.9	Ave.: 92.8				91.6	91.4	Ave.: 91.5										
Turbidity (NTU)	:	12.5	12.8	Ave.: 12.7				13.2	13.3	Ave.: 13.3				13.6	13.9	Ave.: 13.8				13.2	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 14:14 to 14:29 Depth of Water (meter): 9.2 Wet bulb calibration for DO meter: 8.30 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.6						8.2												
Temp. (°C)	:	25.6	25.5	Ave.: 25.5				25.5	25.4	25.5				25.3	25.2	Ave.: 25.3										
pH	:	8.01	8.07	Ave.: 8.04				8.15	8.19	8.17				8.21	8.23	Ave.: 8.22										
Salinity (ppt)	:	25.7	25.7	Ave.: 25.7				25.7	25.8	Ave.: 25.8				25.9	25.8	Ave.: 25.9										
D.O. (mg/L)	:	6.44	6.46	Ave.: 6.45	5.0	4.2	✓	6.39	6.33	Ave.: 6.36	5.0	4.2	✓	6.28	6.31	Ave.: 6.29	4.7	2.0	✓							
D.O.S. (%)	:	91.0	91.3	Ave.: 91.2				90.5	89.4	Ave.: 90.0				88.6	88.9	Ave.: 88.8										
Turbidity (NTU)	:	9.98	9.93	Ave.: 9.96				10.5	10.1	Ave.: 10.3				10.9	11.3	Ave.: 11.1				10.5	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: IS12 Duration: 13:52 to 14:06 Depth of Water (meter): 14.2 Wet bulb calibration for DO meter: 8.41 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.1						13.2												
Temp. (°C)	:	25.5	25.5	Ave.: 25.5				25.4	25.3	25.4				25.3	25.3	Ave.: 25.3										
pH	:	8.34	8.39	Ave.: 8.37				8.42	8.40	8.41				8.51	8.54	Ave.: 8.53										
Salinity (ppt)	:	25.7	25.6	Ave.: 25.7				25.8	25.8	Ave.: 25.8				25.8	25.9	Ave.: 25.9										
D.O. (mg/L)	:	6.55	6.58	Ave.: 6.57	5.0	4.2	✓	6.61	6.59	Ave.: 6.60	5.0	4.2	✓	6.49	6.51	Ave.: 6.50	4.7	2.0	✓							
D.O.S. (%)	:	92.2	92.5	Ave.: 92.4				93.1	92.9	Ave.: 93.0				91.6	91.9	Ave.: 91.8										
Turbidity (NTU)	:	9.06	9.0	Ave.: 9.06				9.19	9.23	Ave.: 9.21				9.33	9.36	Ave.: 9.35				9.22	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 13:31 to 13:45 Depth of Water (meter): 16.6 Wet bulb calibration for DO meter: 8.38 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.3						15.6												
Temp. (°C)	:	25.5	25.6	Ave.: 25.6				25.5	25.4	25.5				25.4	25.4	Ave.: 25.4										
pH	:	8.25	8.31	Ave.: 8.28				8.41	8.37	8.39				8.31	8.37	Ave.: 8.34										
Salinity (ppt)	:	25.7	25.6	Ave.: 25.6				25.7	25.7	Ave.: 25.7				25.9	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.31	6.35	Ave.: 6.33	5.0	4.2	✓	6.39	6.36	Ave.: 6.38	5.0	4.2	✓	6.34	6.37	Ave.: 6.36	4.7	2.0	✓							
D.O.S. (%)	:	88.9	89.3	Ave.: 89.0				89.8	88.6	Ave.: 89.2				89.2	89.6	Ave.: 89.4										
Turbidity (NTU)	:	9.53	8.69	Ave.: 91.4				9.01	9.09	Ave.: 9.06				8.33	8.31	Ave.: 8.32				8.84	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 13:09 to 13:23 Depth of Water (meter): 22.4 Wet bulb calibration for DO meter: 8.34 mg/L (99.6 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.2			21.4					
Temp. (°C)	:	25.7	25.6	Ave.: 25.7	25.5	25.5	Ave.: 25.5	25.3	25.4	Ave.: 25.4			
pH	:	8.31	8.38	Ave.: 8.35	8.37	8.41	Ave.: 8.39	8.45	8.46	Ave.: 8.46			
Salinity (ppt)	:	25.5	25.6	Ave.: 25.6	25.6	25.5	Ave.: 25.6	25.7	25.7	Ave.: 25.7			
D.O. (mg/L)	:	6.73	6.77	Ave.: 6.75	6.72	6.66	Ave.: 6.69	6.59	6.54	Ave.: 6.57			
D.O.S. (%)	:	95.0	95.4	Ave.: 95.2	94.9	94.0	Ave.: 94.5	92.9	92.4	Ave.: 92.7		120%	130%
Turbidity (NTU)	:	10.4	10.8	Ave.: 10.6	11.2	10.9	Ave.: 11.1	11.4	11.6	Ave.: 11.5	11.1	13.3	14.4
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? ~~Y~~ / N If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? ~~Y~~ / N If yes, elaboration is as follows : __________

Field Operator	Jacky Cheung / Leung	Checked by		Laboratory Staff		Checked by	
Date	6. 11. 2013	Date	6/11/13	Date		Date	

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 8/11/12 *Weather Condition :* Fine *Ambient Temperature (°C) :* 27°C *Sea Conditions:* Calm / [✓ Small Wave] / Great Wave *Tide Mode:* Flood Tide *Direction of water current:* From CS6 to CS4

Station: CS6 (Upstream Control Station) *Duration:* 9:32 to 9:47 *Depth of Water (meter):* 12.8 *Wet bulb calibration for DO meter:* 8.40 mg/L (99.7 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.4			11.8					
Temp. (°C)	:	25.1	25.1	Ave.: 25.1	25.1	25.1	Ave.: 25.1	25.1	25.1	Ave.: 25.1			
pH	:	7.64	7.62	Ave.: 7.63	7.67	7.69	Ave.: 7.68	7.62	7.65	Ave.: 7.64			
Salinity (ppt)	:	25.5	25.5	Ave.: 25.5	25.7	25.6	Ave.: 25.7	25.7	25.6	Ave.: 25.7			
D.O. (mg/L)	:	6.04	6.07	Ave.: 6.06	5.96	5.99	Ave.: 5.98	5.95	5.92	Ave.: 5.94			
D.O.S. (%)	:	84.7	85.1	Ave.: 84.9	83.5	83.9	Ave.: 83.7	83.2	82.7	Ave.: 83.0		120%	130%
Turbidity (NTU)	:	4.85	4.89	Ave.: 4.87	5.75	5.78	Ave.: 5.77	5.88	5.86	Ave.: 5.87	5.50	6.6	7.2
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) *Duration:* 10:02 to 10:17 *Depth of Water (meter):* 14.0 *Wet bulb calibration for DO meter:* 8.38 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.0						13.0												
Temp. (°C)	:	25.1	25.1	Ave.: 25.1				25.1	25.1	25.1				25.1	25.1	Ave.: 25.1										
pH	:	7.70	7.72	Ave.: 7.71				7.74	7.75	7.75				7.75	7.75	Ave.: 7.75										
Salinity (ppt)	:	26.0	26.0	Ave.: 26.0				26.0	26.0	Ave.: 26.0				26.0	25.9	Ave.: 26.0										
D.O. (mg/L)	:	5.88	5.85	Ave.: 5.87	5.0	5.0	✓	5.79	5.76	Ave.: 5.78	5.0	5.0	✓	5.88	5.84	Ave.: 586	4.7	2.0	✓							
D.O.S. (%)	:	82.5	82.1	Ave.: 82.3				81.3	80.9	Ave.: 81.1				82.6	82.1	Ave.: 82.4										
Turbidity (NTU)	:	8.87	8.85	Ave.: 8.86				6.81	6.84	Ave.: 6.83				7.22	7.26	Ave.: 7.24				7.64	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 *Duration:* 10:32 to 10:42 *Depth of Water (meter):* 4.8 *Wet bulb calibration for DO meter:* 8.41 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.8												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4										25.2	25.1	Ave.: 25.1										
pH	:	7.79	7.82	Ave.: 7.81										7.80	7.81	Ave.: 7.81										
Salinity (ppt)	:	25.6	25.6	Ave.: 25.6						Ave.:				25.7	25.7	Ave.: 25.7										
D.O. (mg/L)	:	5.93	5.95	Ave.: 9.34	5.0	4.2	✓			Ave.:	5.0	4.2	✓	5.91	5.87	Ave.: 589	4.7	2.0	✓							
D.O.S. (%)	:	83.5	83.8	Ave.: 83.7						Ave.:				83.2	82.6	Ave.: 82.9										
Turbidity (NTU)	:	4.31	4.27	Ave.: 4.29						Ave.:				6.92	6.90	Ave.: 6.91				5.60	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 Duration: 10:48 to 11:03 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 8.37 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	25.3	25.2	Ave.: 25.2										25.2	25.2	Ave.: 25.2										
pH	:	7.85	7.85	Ave.: 7.85										7.89	7.87	Ave.: 7.88										
Salinity (ppt)	:	25.7	25.7	Ave.: 25.7						Ave.:				25.7	25.7	Ave.: 25.7										
D.O. (mg/L)	:	6.06	6.02	Ave.: 6.04	5.0	4.2	✓			Ave.:	5.0	4.2	✓	5.98	5.94	Ave.: 5.97	4.7	2.0	✓							
D.O.S. (%)	:	85.3	84.7	Ave.: 85.0						Ave.:				84.2	83.7	Ave.: 84.0										
Turbidity (NTU)	:	4.47	4.42	Ave.: 4.45						Ave.:				6.53	6.58	Ave. 6.56				5.51	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 11:09 to 11:22 Depth of Water (meter): 11.2 Wet bulb calibration for DO meter: 8.38 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.6						10.2												
Temp. (°C)	:	25.3	25.3	Ave.: 25.3				25.3	25.2	25.3				25.2	25.2	Ave.: 25.2										
pH	:	7.80	7.82	Ave.: 7.81				7.81	7.81	7.81				7.84	7.84	Ave.: 7.84										
Salinity (ppt)	:	25.7	25.7	Ave.: 25.7				25.7	25.7	Ave.: 25.7				25.7	25.7	Ave.: 25.7										
D.O. (mg/L)	:	6.19	6.15	Ave.: 6.17	5.0	4.2	✓	5.98	5.95	Ave.: 5.97	5.0	4.2	✓	5.84	5.87	Ave.: 5.86	4.7	2.0	✓							
D.O.S. (%)	:	87.5	87.0	Ave.: 87.3				84.0	83.6	Ave.: 83.8				82.0	82.5	Ave.: 82.3										
Turbidity (NTU)	:	4.49	4.45	Ave.: 4.47				6.23	6.25	Ave.: 6.24				7.02	7.06	Ave.: 7.04				5.92	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 11:27 to 11:41 Depth of Water (meter): 9.8 Wet bulb calibration for DO meter: 83.2 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.9						8.8												
Temp. (°C)	:	25.3	25.3	Ave.: 25.3				25.2	25.1	25.2				25.2	25.2	Ave.: 25.2										
pH	:	7.88	7.89	Ave.: 7.89				7.87	7.88	7.88				7.80	7.81	Ave.: 7.81										
Salinity (ppt)	:	25.7	25.7	Ave.: 25.7				25.7	25.6	Ave.: 25.7				25.7	25.7	Ave.: 25.7										
D.O. (mg/L)	:	6.01	6.04	Ave.: 6.03	5.0	4.2	✓	5.82	5.78	Ave.: 5.80	5.0	4.2		5.80	5.84	Ave.: 5.82	4.7	2.0	✓							
D.O.S. (%)	:	84.4	84.8	Ave.: 84.6				81.9	81.5	Ave.: 81.7				81.6	82.1	Ave.: 81.9										
Turbidity (NTU)	:	4.66	4.62	Ave.: 4.64				5.31	5.34	Ave.: 5.33				7.19	7.21	Ave.: 7.20				5.72	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

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Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 11:45 to 12:00 Depth of Water (meter): 14.6 Wet bulb calibration for DO meter: 8.43 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.3						13.6												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4				25.2	25.2	25.2				25.2	25.2	Ave.: 25.2										
pH	:	7.84	7.84	Ave.: 7.84				7.86	7.86	7.86				7.89	7.88	Ave.: 7.89										
Salinity (ppt)	:	25.3	25.3	Ave.: 25.3				25.5	25.5	Ave.: 25.5				25.6	25.6	Ave.: 25.6										
D.O. (mg/L)	:	6.03	6.06	Ave.: 6.05	5.0	4.2	✓	5.93	5.96	Ave.: 5.95	5.0	4.2	✓	5.98	5.95	Ave.: 5.97	4.7	2.0	✓							
D.O.S. (%)	:	84.6	84.1	Ave.: 84.4				83.3	83.7	Ave.: 83.5				84.0	83.6	Ave.: 83.8										
Turbidity (NTU)	:	4.69	4.67	Ave.: 4.68				5.23	5.27	Ave.: 5.25				5.60	5.64	Ave.: 5.62				5.18	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 12:10 to 12:24 Depth of Water (meter): 16.6 Wet bulb calibration for DO meter: 8.40 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0																								
Temp. (°C)	:	25.4	25.4	Ave.: 25.4				25.2	25.2	25.2				25.2	25.2	Ave.: 25.2										
pH	:	7.89	7.89	Ave.: 7.89				7.87	7.87	7.87				7.85	7.86	Ave.: 7.86										
Salinity (ppt)	:	25.3	25.3	Ave.: 25.6				25.5	25.5	Ave.: 25.5				25.5	25.4	Ave.: 25.5										
D.O. (mg/L)	:	6.02	6.06	Ave.: 6.04	5.0	4.2	✓	5.97	5.94	Ave.: 5.96	5.0	4.2	✓	5.92	5.96	Ave.: 5.94	4.7	2.0	✓							
D.O.S. (%)	:	84.5	85.0	Ave.: 84.8				83.8	83.4	Ave.: 83.6				83.1	83.6	Ave.: 83.6										
Turbidity (NTU)	:	4.97	4.93	Ave.: 4.95				5.84	5.86	Ave.: 5.85				6.82	6.84	Ave.: 6.83				5.88	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 12:34 to 13:02 Depth of Water (meter): 22.8 Wet bulb calibration for DO meter: 8.39 mg/L (99.5 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0										
Temp. (°C)	:	25.3	25.3	Ave.: 25.3	25.3	25.3	Ave.: 25.3	25.3	25.2	Ave.: 25.3		
pH	:	7.83	7.84	Ave.: 7.84	7.85	7.84	Ave.: 7.85	7.86	7.86	Ave.: 7.86		
Salinity (ppt)	:	25.3	25.3	Ave.: 25.3	25.5	25.5	Ave.: 25.5	25.5	25.4	Ave.: 25.5		
D.O. (mg/L)	:	6.04	6.07	Ave.: 6.06	5.90	5.94	Ave.: 5.92	5.98	5.95	Ave.: 5.97		
D.O.S. (%)	:	84.9	84.6	Ave.: 84.8	82.9	83.4	Ave.: 83.2	84.0	83.6	Ave.: 83.8		
Turbidity (NTU)	:	8.96	8.94	Ave.: 8.95	8.17	8.19	Ave.: 8.18	8.27	8.25	Ave.: 8.26	8.46	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: ______

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : ______

Field Operator	Mak Kei Wai	Checked by		Laboratory Staff		Checked by	
Date	8/11/13	Date	8/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 8/11/2013 *Weather Condition :* Fine *Ambient Temperature (°C) :* 27 *Sea Conditions: Calm / [✓ Small Wave] / Great Wave* *Tide Mode: Ebb Tide* *Direction of water current: From CS4 to CS6*

Station: CS6 *Duration:* 17:20 *to* 17:39 *Depth of Water (meter):* 12.2 *Wet bulb calibration for DO meter:* 8.40 *mg/L (* 99.7 *%)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.1			11.2				
Temp. (°C)	:	25.3	25.1	Ave.: 25.2	25.0	25.2	Ave.: 25.1	25.2	25.0	Ave.: 25.1		
pH	:	7.64	7.66	Ave.: 7.65	7.66	7.66	Ave.: 7.66	7.64	7.66	Ave.: 7.65		
Salinity (ppt)	:	25.4	25.4	Ave.: 25.4	25.8	25.6	Ave.: 25.7	25.8	25.8	Ave.: 25.8		
D.O. (mg/L)	:	6.06	6.04	Ave.: 6.05	5.94	5.92	Ave.: 5.93	5.92	5.90	Ave.: 5.91		
D.O.S. (%)	:	84.8	84.6	Ave.: 84.7	83.2	82.9	Ave.: 83.1	82.9	82.6	Ave.: 82.8		
Turbidity (NTU)	:	5.38	5.36	Ave.: 5.37	5.64	5.66	Ave.: 5.65	6.56	6.52	Ave.: 6.54	5.85	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) *Duration:* 17:59 *to* 18:22 *Depth of Water (meter):* 13.4 *Wet bulb calibration for DO meter:* 8.40 *mg/L (* 99.7 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.7						12.4												
Temp. (°C)	:	25.2	25.4	Ave.: 25.3				25.2	25.2	25.2				25.2	25.0	Ave.: 25.1										
pH	:	7.68	7.70	Ave.: 7.69				7.72	7.72	7.72				7.74	7.74	Ave.: 7.74										
Salinity (ppt)	:	25.8	25.6	Ave.: 25.7				25.8	26.0	Ave.: 25.9				26.2	26.2	Ave.: 26.2										
D.O. (mg/L)	:	5.84	5.86	Ave.: 5.85	5.0	5.0	✓	5.78	5.76	Ave.: 5.77	5.0	5.0	✓	5.76	5.80	Ave.: 5.78	4.7	2.0	✓							
D.O.S. (%)	:	81.8	82.0	Ave.: 81.9				80.9	80.6	Ave.: 80.8				80.6	81.2	Ave.: 80.9										
Turbidity (NTU)	:	5.25	5.29	Ave.: 5.27				9.00	9.04	Ave. 9.02				10.1	10.4	Ave.: 10.3				11.6	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 *Duration:* 17:02 *to* 17:12 *Depth of Water (meter):* 4.6 *Wet bulb calibration for DO meter:* 8.41 *mg/L (* 99.7 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.6												
Temp. (°C)	:	25.4	25.4	Ave.: 25.4										25.4	25.2	Ave.: 25.3										
pH	:	7.78	7.76	Ave.: 7.77										7.80	7.78	Ave.: 7.79										
Salinity (ppt)	:	25.8	25.6	Ave.: 25.7						Ave.:				25.8	26.0	Ave.: 25.9										
D.O. (mg/L)	:	5.94	5.90	Ave.: 5.92	5.0	4.2	✓			Ave.:	5.0	4.2		5.90	5.88	Ave.: 5.89	4.7	2.0	✓							
D.O.S. (%)	:	83.2	82.6	Ave.: 82.9						Ave.:				82.6	82.3	Ave.: 82.5										
Turbidity (NTU)	:	4.54	4.58	Ave.: 4.56						Ave.:				7.78	7.74	Ave.: 7.76				6.16	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: SR9 Duration: 16:37 to 16:47 Depth of Water (meter): 5.6 Wet bulb calibration for DO meter: 8.40 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	25.5	25.7	Ave.: 25.6				~~25.4~~	~~25.6~~	~~25.5~~				25.4	25.6	Ave.: 25.5										
pH	:	7.74	7.78	Ave.: 7.76										7.72	7.74	Ave.: 7.73										
Salinity (ppt)	:	25.6	25.4	Ave.: 25.5						Ave.:				25.8	25.8	Ave.: 25.8										
D.O. (mg/L)	:	6.00	5.98	Ave.: 5.99	5.0	4.2	✓			Ave.:	5.0	4.2		5.96	5.94	Ave.: 5.95	4.7	2.0	✓							
D.O.S. (%)	:	84.0	83.7	Ave.: 83.9						Ave.:				83.4	83.2	Ave.: 83.3										
Turbidity (NTU)	:	5.07	5.03	Ave.: 5.05						Ave.:				8.21	8.26	Ave.: 8.24				6.65	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 16:17 to 16:32 Depth of Water (meter): 10.4 Wet bulb calibration for DO meter: 8.41 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.2						9.4												
Temp. (°C)	:	25.6	25.4	Ave.: 25.5				25.3	25.5	25.4				25.3	25.3	Ave.: 25.3										
pH	:	7.68	7.70	Ave.: 7.69				7.74	7.76	7.75				7.76	7.74	Ave.: 7.75										
Salinity (ppt)	:	25.6	25.6	Ave.: 25.6				25.6	25.8	Ave.: 25.7				25.7	25.6	Ave.: 25.7										
D.O. (mg/L)	:	6.04	6.06	Ave.: 6.05	5.0	4.2	✓	5.96	5.94	Ave.: 5.95	5.0	4.2	✓	5.92	5.90	Ave.: 5.91	4.7	2.0	✓							
D.O.S. (%)	:	84.6	84.8	Ave.: 84.7				83.4	83.2	Ave.: 83.3				82.9	82.6	Ave.: 82.8										
Turbidity (NTU)	:	4.89	4.92	Ave.: 4.91				5.93	5.92	Ave.: 5.93				6.99	7.03	Ave.: 7.01				5.95	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 15:58 to 16:13 Depth of Water (meter): 9.2 Wet bulb calibration for DO meter: 8.40 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.6						8.2												
Temp. (°C)	:	25.4	25.6	Ave.: 25.5				25.4	25.4	25.4				25.4	25.3	Ave.: 25.4										
pH	:	7.72	7.70	Ave.: 7.71				7.76	7.80	7.78				7.80	7.76	Ave.: 7.78										
Salinity (ppt)	:	25.4	25.6	Ave.: 25.5				25.6	25.6	Ave.: 25.6				25.6	25.8	Ave.: 25.7										
D.O. (mg/L)	:	6.04	6.00	Ave.: 6.02	5.0	4.2	✓	5.90	5.86	Ave.: 5.88	5.0	4.2	✓	5.84	5.80	Ave.: 5.82	4.7	2.0	✓							
D.O.S. (%)	:	84.6	84.0	Ave.: 84.3				~~84~~ 82.6	82.0	Ave.: 82.3				81.8	81.2	Ave.: 81.5										
Turbidity (NTU)	:	5.22	5.26	Ave.: 5.24				6.69	6.68	Ave.: 6.69				7.79	7.77	Ave.: 7.78				6.57	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: IS12 Duration: 15:40 to 15:54 Depth of Water (meter): 14.2 Wet bulb calibration for DO meter: 8.40 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.1						13.2												
Temp. (°C)	:	25.6	25.4	Ave.: 25.5				25.4	25.4	25.4				25.4	25.2	Ave.: 25.3										
pH	:	7.74	7.76	Ave.: 7.75				7.78	7.76	7.77				7.80	7.78	Ave.: 7.79										
Salinity (ppt)	:	25.4	25.4	Ave.: 25.4				25.6	25.4	Ave.: 25.5				25.6	25.4	Ave.: 25.5										
D.O. (mg/L)	:	6.00	5.98	Ave.: 5.99	5.0	4.2	✓	5.94	5.90	Ave.: 5.92	5.0	4.2	✓	5.86	5.84	Ave.: 5.85	4.7	2.0	✓							
D.O.S. (%)	:	84.0	83.7	Ave.: 83.9				83.2	82.6	Ave.: 82.9				81.8	81.8	Ave.: 81.8										
Turbidity (NTU)	:	4.79	4.77	Ave.: 4.78				4.67	4.71	Ave.: 4.69				6.83	6.85	Ave.: 6.84				5.44	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 15:22 to 15:36 Depth of Water (meter): 16.6 Wet bulb calibration for DO meter: 8.37 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.3						15.6												
Temp. (°C)	:	25.5	25.7	Ave.: 25.6				25.5	25.3	25.4				25.4	25.2	Ave.: 25.3										
pH	:	7.76	7.74	Ave.: 7.75				7.76	7.78	7.77				7.82	7.80	Ave.: 7.81										
Salinity (ppt)	:	25.4	25.4	Ave.: 25.4				25.6	25.4	Ave.: 25.5				25.6	25.4	Ave.: 25.5										
D.O. (mg/L)	:	5.98	5.96	Ave.: 5.97	5.0	4.2	✓	5.94	5.92	Ave.: 5.93	5.0	4.2	✓	5.94	5.90	Ave.: 5.92	4.7	2.0	✓							
D.O.S. (%)	:	83.7	83.4	Ave.: 83.6				83.2	82.9	Ave.: 83.1				83.2	82.6	Ave.: 82.9										
Turbidity (NTU)	:	5.24	5.28	Ave.: 5.26				6.57	6.55	Ave.: 6.56				4.88	4.92	Ave.: 4.90				5.57	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 14:57 to 15:12 Depth of Water (meter): 22.4 Wet bulb calibration for DO meter: 8.38 mg/L (99.5 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.2			~~22~~ 21.4					
Temp. (°C)	:	25.5	25.3	Ave.: 25.4	25.4	25.4	Ave.: 25.4	25.3	25.3	Ave.: 25.3			
pH	:	7.78	7.80	Ave.: 7.79	7.82	7.78	Ave.: 7.80	7.82	7.80	Ave.: 7.81			
Salinity (ppt)	:	25.4	25.4	Ave.: 25.4	25.6	25.6	Ave.: 25.6	25.6	25.6	Ave.: 25.6			
D.O. (mg/L)	:	6.00	6.02	Ave.: 6.01	5.88	5.90	Ave.: 5.89	5.86	5.88	Ave.: 5.87			
D.O.S. (%)	:	84.1	84.4	Ave.: 84.3	82.4	82.7	Ave.: 82.6	82.2	82.5	Ave.: 82.4		120%	130%
Turbidity (NTU)	:	10.1	10.3	Ave.: 10.2	9.12	9.14	Ave.: 9.13	9.06	9.08	Ave.: 9.07	9.47	~~11.4~~ 11.36	12.31
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: ____________

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : ____________

Field Operator	Lee Kwai Cheung	Checked by		Laboratory Staff		Checked by	
Date	8/11/2013	Date	8/11/13	Date		Date	

東業德勤測試顧問有限公司
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Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 11/11/13 Weather Condition : Cloudy Ambient Temperature (°C) : 26°C Sea Conditions: Calm / Small Wave / [✓ Great Wave] Tide Mode: **Flood Tide** Direction of water current: **From CS6 to CS4**

Station: CS6 (Upstream Control Station) Duration: 12:54 to 13:09 Depth of Water (meter): 12.6 Wet bulb calibration for DO meter: 8.43 mg/L (99.7 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.3			11.6					
Temp. (°C)	:	25.3	25.3	Ave.: 25.3	25.3	25.3	Ave.: 25.3	25.2	25.2	Ave.: 25.2			
pH	:	7.69	7.67	Ave.: 7.68	7.70	7.69	Ave.: 770	7.72	7.71	Ave.: 7.72			
Salinity (ppt)	:	25.2	25.2	Ave.: 25.2	25.3	25.2	Ave.: 25.3	25.3	25.3	Ave.: 256			
D.O. (mg/L)	:	6.33	6.31	Ave.: 6.32	6.36	6.32	Ave.: 6.34	6.28	6.30	Ave.: 6.29			
D.O.S. (%)	:	89.0	88.7	Ave.: 88.9	89.2	88.7	Ave.: 89.0	88.1	88.4	Ave.: 88.3		120%	130%
Turbidity (NTU)	:	4.61	4.65	Ave.: 4.63	5.36	5.32	Ave.: 5.34	5.01	5.08	Ave.: 5.05	5.01	6.01	6.51
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) Duration: 13:24 to 13:39 Depth of Water (meter): 13.8 Wet bulb calibration for DO meter: 8.38 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.9						12.8												
Temp. (°C)	:	25.6	25.6	Ave.: 25.6				25.3	25.3	25.3				25.3	25.3	Ave.: 25.3										
pH	:	7.74	7.74	Ave.: 7.74				7.76	7.78	7.77				7.84	7.84	Ave.: 7.84										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9				25.0	25.1	Ave.: 25.1				25.2	25.2	Ave.: 25.2										
D.O. (mg/L)	:	6.40	6.44	Ave.: 6.42	5.0	5.0	✓	6.36	6.34	Ave.: 6.35	5.0	5.0	✓	6.30	6.27	Ave.: 6.29	4.7	2.0	✓							
D.O.S. (%)	:	89.9	90.5	Ave.: 90.2				89.3	89.0	Ave.: 89.2				88.4	88.0	Ave.: 88.2										
Turbidity (NTU)	:	5.61	5.65	Ave.: 5.63				5.36	5.32	Ave.: 5.34				5.06	5.01	Ave.: 5.04				5.34	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 Duration: 13:54 to 14:07 Depth of Water (meter): 5.2 Wet bulb calibration for DO meter: 8.41 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.2												
Temp. (°C)	:	25.2	25.2	Ave.: 25.2										25.2	25.2	Ave.: 25.2										
pH	:	7.81	7.82	Ave.: 7.82										7.80	7.81	Ave.: 7.81										
Salinity (ppt)	:	25.3	25.3	Ave.: 25.3						Ave.:				25.3	25.3	Ave.: 25.3										
D.O. (mg/L)	:	6.32	6.34	Ave.: 6.33	5.0	4.2	✓			Ave.:	5.0	4.2	✓	6.28	6.24	Ave.: 6.26	4.7	2.0	✓							
D.O.S. (%)	:	88.7	89.1	Ave.: 88.9						Ave.:				88.1	87.7	Ave.: 87.9										
Turbidity (NTU)	:	7.20	7.25	Ave.: 7.23						Ave.:				11.0	11.0	Ave.: 11.0				9.12	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

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Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 Duration: 14:16 to 14:29 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 8.44 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	25.2	25.2	Ave.: 25.2										25.2	25.1	Ave.: 25.1										
pH	:	7.81	7.80	Ave.: 7.81				~~78~~						7.82	7.82	Ave.: 7.82										
Salinity (ppt)	:	25.4	25.4	Ave.: 25.4						Ave.:				25.3	25.2	Ave.: 25.3										
D.O. (mg/L)	:	6.09	6.06	Ave.: 6.08	5.0	4.2	✓			Ave.:	5.0	4.2	✓	6.10	6.07	Ave.: 6.09	4.7	2.0	✓							
D.O.S. (%)	:	85.4	85.0	Ave.: 85.2						Ave.:				85.5	85.1	Ave.: 85.3										
Turbidity (NTU)	:	6.85	6.81	Ave.: 6.83						Ave.:				6.77	6.72	Ave.: 6.75				6.79	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 14:35 to 14:50 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 8.39 mg/L (99.3 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.4						9.8												
Temp. (°C)	:	25.2	25.2	Ave.: 25.2				25.2	25.2	25.2				25.2	25.1	Ave.: 25.2										
pH	:	7.84	7.84	Ave.: 7.84				7.86	7.86	7.86				7.85	7.84	Ave.: 7.85										
Salinity (ppt)	:	25.3	25.3	Ave.: 25.3				25.3	25.3	Ave.: 25.3				25.3	25.3	Ave.: 25.3										
D.O. (mg/L)	:	6.20	6.23	Ave.: 6.22	5.0	4.2	✓	6.22	6.19	Ave.: 6.21	5.0	4.2	✓	6.21	6.19	Ave.: 6.20	4.7	2.0	✓							
D.O.S. (%)	:	87.0	87.4	Ave.: 87.2				87.3	86.9	Ave.: 87.1				87.1	86.8	Ave.: 87.0										
Turbidity (NTU)	:	6.80	6.85	Ave.: 6.83				5.62	5.68	Ave.: 5.65				6.04	6.08	Ave.: 6.06				6.18	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 14:56 to 15:10 Depth of Water (meter): 9.8 Wet bulb calibration for DO meter: 8.40 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.9						8.8												
Temp. (°C)	:	25.3	25.3	Ave.: 25.3				25.2	25.2	25.2				25.2	25.2	Ave.: 25.2										
pH	:	7.86	7.85	Ave.: 7.86				7.85	7.85	7.85				7.83	7.82	Ave.: 7.83										
Salinity (ppt)	:	25.3	25.3	Ave.: 25.3				25.3	25.3	Ave.: 25.3				25.3	25.3	Ave.: 25.3										
D.O. (mg/L)	:	6.23	6.27	Ave.: 6.25	5.0	4.2	✓	6.25	6.21	Ave.: 6.23	5.0	4.2	✓	6.19	6.16	Ave.: 6.18	4.7	2.0	✓							
D.O.S. (%)	:	87.5	88.0	Ave.: 87.8				87.6	87.1	Ave.: 87.4				86.8	86.4	Ave.: 86.6										
Turbidity (NTU)	:	8.57	8.52	Ave.: 8.55				12.8	12.7	Ave.: 12.8				10.3	10.2	Ave.: 10.3				10.6	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

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Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 15:17 to 15:32 Depth of Water (meter): 14.6 Wet bulb calibration for DO meter: 8.39 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.3						13.6												
Temp. (°C)	:	25.2	25.2	Ave.: 25.2				25.2	25.2	25.2				25.2	25.2	Ave.: 25.2										
pH	:	7.82	7.82	Ave.: 7.82				7.85	7.84	7.85				7.88	7.87	Ave.: 7.88										
Salinity (ppt)	:	25.3	25.3	Ave.: 25.3				25.3	25.3	Ave.: 25.3				25.3	25.3	Ave.: 25.3										
D.O. (mg/L)	:	6.09	6.05	Ave.: 6.07	5.0	4.2	✓	6.08	6.04	Ave.: 6.06	5.0	4.2	✓	6.16	6.14	Ave.: 6.15	4.7	2.0	✓							
D.O.S. (%)	:	85.8	85.2	Ave.: 85.5				85.5	85.0	Ave.: 85.3				86.4	86.1	Ave.: 86.3										
Turbidity (NTU)	:	5.94	5.91	Ave.: 5.96				5.78	5.77	Ave.: 5.78				5.01	5.08	Ave.: 5.05				5.60	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 15:40 to 15:55 Depth of Water (meter): 16.6 Wet bulb calibration for DO meter: 8.41 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.3						15.6												
Temp. (°C)	:	25.2	25.2	Ave.: 25.2				25.2	25.2	25.2				25.2	25.2	Ave.: 25.2										
pH	:	7.84	7.84	Ave.: 7.84				7.85	7.85	7.85				7.81	7.82	Ave.: 7.82										
Salinity (ppt)	:	25.3	25.3	Ave.: 25.3				25.3	25.3	Ave.: 25.3				25.3	25.2	Ave.: 25.3										
D.O. (mg/L)	:	6.27	6.29	Ave.: 6.28	5.0	4.2	✓	6.10	6.07	Ave.: 6.09	5.0	4.2	✓	6.09	6.05	Ave.: 6.07	4.7	2.0	✓							
D.O.S. (%)	:	88.1	88.4	Ave.: 88.3				85.7	85.3	Ave.: 85.5				85.3	84.8	Ave.: 85.1										
Turbidity (NTU)	:	5.28	5.33	Ave.: 5.31				5.01	5.09	Ave.: 5.05				5.69	5.74	Ave.: 5.72				5.36	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 16:07 to 16:24 Depth of Water (meter): 22.8 Wet bulb calibration for DO meter: 8.42 mg/L (99.7 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.4			21.8				
Temp. (°C)	:	25.3	25.3	Ave.: 25.3	25.2	25.2	Ave.: 25.2	25.2	25.2	Ave.: 25.2		
pH	:	7.87	7.88	Ave.: 7.88	7.86	7.86	Ave.: 7.86	7.85	7.86	Ave.: 7.86		
Salinity (ppt)	:	25.2	25.2	Ave.: 25.2	25.3	25.2	Ave.: 25.3	25.3	25.3	Ave.: 25.6		
D.O. (mg/L)	:	6.36	6.33	Ave.: 6.35	6.03	6.07	Ave.: 6.0	6.17	6.14	Ave.: 6.16		
D.O.S. (%)	:	89.3	88.9	Ave.: 88.6	84.8	85.3	Ave.: 85.1	86.6	86.2	Ave.: 86.4		
Turbidity (NTU)	:	5.94	5.98	Ave.: 5.96	6.47	6.42	Ave.: 6.45	6.28	6.35	Ave.: 6.32	6.41	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : __________

Field Operator	Mak Kei Wai	Checked by		Laboratory Staff		Checked by	
Date	11/11/13	Date	11/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 11-11-13 Weather Condition : cloudy Ambient Temperature (°C) : 26 Sea Conditions: Calm / Small Wave / [✓ Great Wave] Tide Mode: Ebb Tide Direction of water current: From CS4 to CS6

8 Station: CS6 Duration: 2146 to 2201 Depth of Water (meter): 12.2 Wet bulb calibration for DO meter: 8.41 mg/L (98.6 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.1			11.2				
Temp. (°C)	:	25.0	25.0	Ave.: 25.0	25.1	25.1	Ave.: 25.1	25.1	25.1	Ave.: 25.1		
pH	:	7.83	7.82	Ave.: 7.83	7.84	7.84	Ave.: 7.84	7.83	7.84	Ave.: 7.84		
Salinity (ppt)	:	25.2	25.2	Ave.: 25.2	25.3	25.3	Ave.: 25.3	25.4	25.4	Ave.: 25.4		
D.O. (mg/L)	:	6.14	6.10	Ave.: 6.12	6.04	6.00	Ave.: 6.02	5.88	5.94	Ave.: 5.91		
D.O.S. (%)	:	86.3	85.7	Ave.: 86.0	84.8	84.3	Ave.: 84.6	82.6	83.5	Ave.: 83.1		
Turbidity (NTU)	:	5.14	5.07	Ave.: 5.11	4.74	4.78	Ave.: 4.77	5.10	4.98	Ave.: 5.04	4.97	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

9 Station: SR10 (FCZ) Duration: 2216 to 2231 Depth of Water (meter): 13.4 Wet bulb calibration for DO meter: 8.40 mg/L (98.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.7						12.4												
Temp. (°C)	:	25.1	25.1	Ave.: 25.1				25.2	25.2	25.2				25.1	25.2	Ave.: 25.2										
pH	:	7.83	7.83	Ave.: 7.83				7.82	7.82	7.82				7.82	7.82	Ave.: 7.82										
Salinity (ppt)	:	25.1	25.1	Ave.: 25.1				25.2	25.2	Ave.: 25.2				25.3	25.2	Ave.: 25.3										
D.O. (mg/L)	:	6.08	6.16	Ave.: 6.12	5.0	5.0	✓	6.06	6.00	Ave.: 6.03	5.0	5.0	✓	5.87	5.80	Ave.: 5.84	4.7	2.0	✓							
D.O.S. (%)	:	85.4	86.5	Ave.: 86.0				85.1	84.3	Ave.: 84.7				83.8	82.9	Ave.: 83.4										
Turbidity (NTU)	:	4.92	4.88	Ave.: 4.90				4.74	4.60	Ave.: 4.67				4.48	4.55	Ave.: 4.52				4.70	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

7 Station: SR8 Duration: 2126 to 2136 Depth of Water (meter): 4.8 Wet bulb calibration for DO meter: 8.46 mg/L (98.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.8												
Temp. (°C)	:	25.1	25.1	Ave.: 25.1										25.1	25.1	Ave.: 25.1										
pH	:	7.83	7.83	Ave.: 7.83										7.82	7.82	Ave.: 7.82										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0						Ave.:				25.2	25.2	Ave.: 25.2										
D.O. (mg/L)	:	6.14	6.20	Ave.: 6.17	5.0	4.2	✓			Ave.:	5.0	4.2	✓	6.00	6.08	Ave.: 6.04	4.7	2.0	✓							
D.O.S. (%)	:	86.3	87.1	Ave.: 86.7						Ave.:				84.3	85.4	Ave.: 84.9										
Turbidity (NTU)	:	5.58	5.53	Ave.: 5.56						Ave.:				12.8	13.6	Ave.: 13.2				9.38	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

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Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

6 Station: SR9 Duration: 2106 to 2116 Depth of Water (meter): 5.4 Wet bulb calibration for DO meter: 8.46 mg/L (98.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.4												
Temp. (°C)	:	25.0	25.0	Ave.: 25.0										25.0	25.0	Ave.: 25.0										
pH	:	7.82	7.83	Ave.: 7.83										7.82	7.82	Ave.: 7.82										
Salinity (ppt)	:	25.2	25.2	Ave.: 25.2						Ave.:				25.3	25.4	Ave.: 25.4										
D.O. (mg/L)	:	6.12	6.14	Ave.: 6.13	5.0	4.2	✓			Ave.:	5.0	4.2		6.08	6.04	Ave.: 6.06	4.7	2.0	✓							
D.O.S. (%)	:	86.0	86.3	Ave.: 86.2						Ave.:				85.4	84.9	Ave.: 85.2										
Turbidity (NTU)	:	5.82	5.68	Ave.: 5.75						Ave.:				5.99	6.13	Ave.: 6.06				5.91	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

5 Station: IS15 Duration: 2041 to 2056 Depth of Water (meter): 10.4 Wet bulb calibration for DO meter: 8.43 mg/L (98.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.2						9.4												
Temp. (°C)	:	25.0	25.0	Ave.: 25.0				24.9	24.9	24.9				24.8	24.8	Ave.: 24.8										
pH	:	7.83	7.82	Ave.: 7.83				7.82	7.82	7.82				7.82	7.82	Ave.: 7.82										
Salinity (ppt)	:	25.1	25.1	Ave.: 25.1				25.2	25.2	Ave.: 25.2				25.3	25.3	Ave.: 25.3										
D.O. (mg/L)	:	6.08	6.12	Ave.: 6.10	5.0	4.2	✓	6.02	6.08	Ave.: 6.05	5.0	4.2	✓	5.88	5.84	Ave.: 5.86	4.7	2.0	✓							
D.O.S. (%)	:	85.4	86.0	Ave.: 85.7				84.6	85.4	Ave.: 85.0				84.0	83.5	Ave.: 83.8										
Turbidity (NTU)	:	5.68	5.53	Ave.: 5.61				5.80	5.74	Ave.: 5.77				6.30	6.41	Ave.: 6.36				5.91	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

9 Station: IS13 Duration: 2016 to 2031 Depth of Water (meter): 9.4 Wet bulb calibration for DO meter: 8.42 mg/L (98.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.7						8.4												
Temp. (°C)	:	25.0	25.0	Ave.: 25.0				24.9	25.0	25.0				24.9	24.9	Ave.: 24.9										
pH	:	7.83	7.83	Ave.: 7.83				7.82	7.82	7.82				7.82	7.82	Ave.: 7.83										
Salinity (ppt)	:	25.1	25.2	Ave.: 25.2				25.1	25.1	Ave.: 25.1				25.1	25.0	Ave.: 25.1										
D.O. (mg/L)	:	6.00	6.04	Ave.: 6.03	5.0	4.2	✓	5.97	5.90	Ave.: 5.94	5.0	4.2	✓	5.94	5.90	Ave.: 5.92	4.7	2.0	✓							
D.O.S. (%)	:	84.3	84.9	Ave.: 84.6				83.9	82.9	Ave.: 83.4				83.5	82.9	Ave.: 83.2										
Turbidity (NTU)	:	8.28	8.45	Ave.: 8.37				12.3	12.0	Ave.: 12.2				9.05	8.96	Ave.: 9.01				9.84	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

3 Station: IS12 Duration: 1851 to 2006 Depth of Water (meter): 14.0 Wet bulb calibration for DO meter: 8.60 mg/L (98.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.0						13.0												
Temp. (°C)	:	25.0	24.8	Ave.: 25.0				25.1	25.1	25.1				25.0	25.0	Ave.: 25.0										
pH	:	7.83	7.83	Ave.: 7.83				7.82	7.82	7.82				7.81	7.81	Ave.: 7.82										
Salinity (ppt)	:	25.0	25.1	Ave.: 25.1				25.1	25.2	Ave.: 25.2				25.2	25.2	Ave.: 25.2										
D.O. (mg/L)	:	5.87	5.92	Ave.: 5.85	5.0	4.2	✓	5.90	5.84	Ave.: 5.87	5.0	4.2	✓	5.88	5.92	Ave.: 5.90	4.7	2.0	✓							
D.O.S. (%)	:	83.8	83.2	Ave.: 83.6				82.9	82.0	Ave.: 82.5				82.6	83.2	Ave.: 82.9										
Turbidity (NTU)	:	5.01	4.86	Ave.: 4.98				5.78	5.63	Ave.: 5.71				5.72	5.66	Ave.: 5.68				5.46	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

2 Station: IS14 Duration: 1826 to 1841 Depth of Water (meter): 16.0 Wet bulb calibration for DO meter: 8.38 mg/L (98.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.0						15.0												
Temp. (°C)	:	24.8	24.8	Ave.: 24.8				25.0	25.0	25.0				25.1	25.1	Ave.: 25.1										
pH	:	7.84	7.85	Ave.: 7.85				7.84	7.84	7.84				7.83	7.83	Ave.: 7.83										
Salinity (ppt)	:	25.1	25.1	Ave.: 25.1				25.1	25.2	Ave.: 25.2				25.2	25.2	Ave.: 25.2										
D.O. (mg/L)	:	6.03	6.10	Ave.: 6.07	5.0	4.2	✓	6.00	5.96	Ave.: 5.98	5.0	4.2	✓	6.10	6.00	Ave.: 6.05	4.7	2.0	✓							
D.O.S. (%)	:	84.7	85.7	Ave.: 85.3				84.3	83.7	Ave.: 84.0				85.7	84.3	Ave.: 85.0										
Turbidity (NTU)	:	5.37	5.42	Ave.: 5.40				5.96	5.88	Ave.: 5.92				6.10	6.22	Ave.: 6.16				5.83	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

1 Station: CS4(Upstream Control Station) Duration: 1901 to 1916 Depth of Water (meter): 22.0 Wet bulb calibration for DO meter: 8.42 mg/L (98.6 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.0			21.0					
Temp. (°C)	:	24.8	24.8	Ave.: 24.8	25.0	25.0	Ave.: 25.0	25.1	25.1	Ave.: 25.1			
pH	:	7.84	7.84	Ave.: 7.84	7.83	7.83	Ave.: 7.83	7.83	7.83	Ave.: 7.83			
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0	25.1	25.1	Ave.: 25.1	25.1	25.2	Ave.: 25.2			
D.O. (mg/L)	:	6.12	6.00	Ave.: 6.06	5.87	5.80	Ave.: 5.84	5.84	5.80	Ave.: 5.82			
D.O.S. (%)	:	86.0	84.3	Ave.: 85.1	83.8	82.8	Ave.: 83.5	82.1	81.5	Ave.: 81.8		120%	130%
Turbidity (NTU)	:	5.48	5.60	Ave.: 5.54	5.78	5.93	Ave.: 5.86	6.80	7.04	Ave.: 6.92	6.11	7.33	7.84
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? Y / [✓ N] if yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : __________

Field Operator	Peter	Checked by		Laboratory Staff		Checked by	
Date	11-11-13	Date	11/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Conaition)**

Sampling Date : 13-11-2013 Weather Condition : cloudy Ambient Temperature (°C) : 23 Sea Conditions: Calm / [✓ Small Wave] / Great Wave Tide Mode: Ebb Tide Direction of water current: From CS4 to CS6

Station: CS6 Duration: 10:54 to 11:12 Depth of Water (meter): 12.4 Wet bulb calibration for DO meter: 8.36 mg/L (99.2 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.2			11.4				
Temp. (°C)	:	24.9	24.9	Ave.: 24.9	24.8	24.7	Ave.: 24.8	24.7	24.7	Ave.: 24.7		
pH	:	7.79	7.79	Ave.: 7.79	7.85	7.85	Ave.: 7.85	7.88	7.87	Ave.: 7.88		
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0	25.0	25.0	Ave.: 25.0	25.1	25.1	Ave.: 25.1		
D.O. (mg/L)	:	6.16	6.19	Ave.: 6.18	6.12	6.10	Ave.: 6.11	6.02	6.08	Ave.: 6.05		
D.O.S. (%)	:	86.2	86.6	Ave.: 86.4	85.7	85.4	Ave.: 85.6	84.3	85.1	Ave.: 84.7		
Turbidity (NTU)	:	3.21	3.29	Ave.: 3.25	3.47	3.49	Ave.: 3.48	3.67	3.70	Ave.: 3.69	3.47	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) Duration: 10:28 to 10:48 Depth of Water (meter): 13.4 Wet bulb calibration for DO meter: 8.39 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.7						12.4												
Temp. (°C)	:	24.9	24.9	Ave.: 24.9				24.8	24.8	24.8				24.8	24.7	Ave.: 24.8										
pH	:	7.82	7.83	Ave.: 7.83				7.99	7.98	7.99				7.91	7.92	Ave.: 7.92										
Salinity (ppt)	:	24.9	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.03	6.07	Ave.: 6.05	5.0	5.0	√	5.93	5.97	Ave.: 5.95	5.0	5.0	√	5.90	5.87	Ave.: 5.89	4.7	2.0	√							
D.O.S. (%)	:	84.4	84.9	Ave.: 84.7				83.0	83.6	Ave.: 83.3				82.6	82.2	Ave.: 82.4										
Turbidity (NTU)	:	3.66	3.64	Ave.: 3.65				3.27	3.21	Ave.: 3.24				3.45	3.41	Ave.: 3.43				3.44	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 Duration: 10:08 to 10:23 Depth of Water (meter): 5.0 Wet bulb calibration for DO meter: 8.40 mg/L (99.3 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.0												
Temp. (°C)	:	24.9	24.9	Ave.: 24.9										24.8	24.8	Ave.: 24.8										
pH	:	7.88	7.88	Ave.: 7.88										7.89	7.90	Ave.: 7.90										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9						Ave.:				25.0	25.1	Ave.: 25.1										
D.O. (mg/L)	:	5.97	5.99	Ave.: 5.98	5.0	4.2	√			Ave.:	5.0	4.2		5.77	5.80	Ave.: 5.79	4.7	2.0	√							
D.O.S. (%)	:	83.6	83.9	Ave.: 83.8						Ave.:				80.8	81.2	Ave.: 81.0										
Turbidity (NTU)	:	3.16	3.20	Ave.: 3.18						Ave.:				3.65	3.68	Ave.: 3.67				3.43	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: SR9 Duration: 9:52 to 10:05 Depth of Water (meter): 5.2 Wet bulb calibration for DO meter: 8.44 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.2												
Temp. (°C)	:	24.8	24.8	Ave.: 24.8										24.7	24.7	Ave.: 24.7										
pH	:	7.78	7.79	Ave.: 7.79										7.88	7.88	Ave.: 7.88										
Salinity (ppt)	:	25.0	24.9	Ave.: 25.0						Ave.:				25.1	25.0	Ave.: 25.1										
D.O. (mg/L)	:	6.19	6.11	Ave.: 6.15	5.0	4.2	√			Ave.:	5.0	4.2		6.09	6.01	Ave.: 6.05	4.7	2.0	√							
D.O.S. (%)	:	86.7	855	Ave.: 86.1						Ave.:				85.3	84.1	Ave.: 84.7										
Turbidity (NTU)	:	3.20	3.28	Ave.: 3.24						Ave.:				3.23	3.27	Ave.: 3.25				3.25	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 9:30 to 9:49 Depth of Water (meter): 10.4 Wet bulb calibration for DO meter: 8.41 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.2						9.4												
Temp. (°C)	:	24.7	24.8	Ave.: 24.8				24.7	24.7	24.7				24.7	24.6	Ave.: 24.7										
pH	:	7.81	7.83	Ave.: 7.82				7.90	7.91	7.91				7.93	7.94	Ave.: 7.94										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.06	6.04	Ave.: 6.05	5.0	4.2	√	5.88	5.82	Ave.: 5.85	5.0	4.2	√	5.93	5.97	Ave.: 5.95	4.7	2.0	√							
D.O.S. (%)	:	84.8	84.6	Ave.: 84.7				82.3	81.5	Ave.: 81.9				83.0	83.6	Ave.: 83.3										
Turbidity (NTU)	:	3.33	331	Ave.: 332				3.81	390	Ave.: 3.89				4.30	4.38	Ave.: 4.34				3.85	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 9:08 to 9:28 Depth of Water (meter): 9.2 Wet bulb calibration for DO meter: 8.42 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.6						8.2												
Temp. (°C)	:	24.8	24.8	Ave.: 24.8				24.7	24.7	24.7				24.6	24.6	Ave.: 24.6										
pH	:	7.91	7.92	Ave.: 7.92				7.94	7.94	7.94				7.98	7.99	Ave.: 7.99										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9				24.9	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0										
D.O. (mg/L)	:	5.91	5.99	Ave.: 5.95	5.0	4.2	√	5.90	5.94	Ave.: 5.92	5.0	4.2	√	5.88	5.90	Ave.: 5.89	4.7	2.0	√							
D.O.S. (%)	:	82.7	83.9	Ave.: 83.3				82.6	83.2	Ave.: 8.29				82.3	82.6	Ave.: 82.5										
Turbidity (NTU)	:	3.46	3.50	Ave.: 3.48				3.15	3.19	Ave.: 3.17				3.59	3.61	Ave.: 3.60				3.42	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Tuen Mun – Chek Lap Kok Link – ***Northern***

Impact Water Quality Monitoring - Data Record Sheet ***(Ebb Condition)***

Station: IS12 *Duration:* 8:46 *to* 9:02 *Depth of Water (meter):* 13.6 *Wet bulb calibration for DO meter:* 8.40 *mg/L (* 99.5 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.8						12.6												
Temp. (°C)	:	24.9	24.8	Ave.: 24.9				24.7	24.7	24.7				24.7	24.6	Ave.: 24.7										
pH	:	7.70	7.70	Ave.: 7.70				7.84	7.85	7.85				7.81	7.81	Ave.: 7.81										
Salinity (ppt)	:	25.0	24.9	Ave.: 25.0				25.0	25.0	Ave.: 25.0				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.14	6.16	Ave.: 6.15	5.0	4.2	✓	6.20	6.18	Ave.: 6.19	5.0	4.2	✓	6.00	5.99	Ave.: 6.00	4.7	2.0	✓							
D.O.S. (%)	:	85.9	86.2	Ave.: 86.1				86.8	86.5	Ave.: 86.5				84.0	83.9	Ave.: 84.0										
Turbidity (NTU)	:	3.55	3.58	Ave.: 3.57				3.72	3.70	Ave.: 3.71				3.46	3.50	Ave.: 3.48				3.59	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 *Duration:* 8:14 *to* 8:38 *Depth of Water (meter):* 16.0 *Wet bulb calibration for DO meter:* 8.41 *mg/L (* 99.5 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.0						15.0												
Temp. (°C)	:	24.8	24.8	Ave.: 24.8				24.8	24.7	24.8				24.7	24.7	Ave.: 24.7										
pH	:	7.74	7.75	Ave.: 7.75				7.80	7.80	7.80				7.85	7.86	Ave.: 7.86										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9				25.0	25.0	Ave.: 25.0				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.06	6.02	Ave.: 6.04	5.0	4.2	✓	6.14	6.10	Ave.: 6.12	5.0	4.2	✓	6.01	6.05	Ave.: 6.03	4.7	2.0	✓							
D.O.S. (%)	:	84.8	84.3	Ave.: 84.6				85.9	85.4	Ave.: 85.7				84.1	84.7	Ave.: 84.4										
Turbidity (NTU)	:	3.46	3.50	Ave.: 3.48				3.16	3.20	Ave.: 3.18				3.52	3.58	Ave.: 3.55				3.40	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) *Duration:* 7:42 *to* 8:06 *Depth of Water (meter):* 22.0 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.3 *%)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.0			21.0					
Temp. (°C)	:	24.8	24.8	Ave.: 24.8	24.7	24.7	Ave.: 24.7	24.7	24.7	Ave.: 24.7			
pH	:	7.91	7.90	Ave.: 7.91	7.90	7.90	Ave.: 7.90	7.97	7.96	Ave.: 7.97			
Salinity (ppt)	:	24.9	25.0	Ave.: 25.0	25.0	25.0	Ave.: 25.0	25.1	25.1	Ave.: 25.1			
D.O. (mg/L)	:	6.03	6.01	Ave.: 6.02	5.99	5.97	Ave.: 5.98	5.85	5.86	Ave.: 5.86			
D.O.S. (%)	:	84.4	84.1	Ave.: 84.3	83.9	83.6	Ave.: 83.8	81.9	82.0	Ave.: 82.0		120%	130%
Turbidity (NTU)	:	3.58	3.62	Ave.: 3.60	3.89	3.81	Ave.: 3.85	3.94	3.96	Ave.: 3.95	3.80	4.56	4.94
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? ~~Y~~ / [✓ N] If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? ~~Y~~ / [✓ N] If yes, elaboration is as follows : __________

Field Operator	S. H. Lam	Checked by		Laboratory Staff		Checked by	
Date	13-11-2013	Date	13/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Co..dition)**

Sampling Date : 13-11-2013 *Weather Condition :* cloudy *Ambient Temperature (°C) :* 23 *Sea Conditions: Calm / [✓ Small Wave] / Great Wave* *Tide Mode: Flood Tide* *Direction of water current: From CS6 to CS4*

Station: CS6 (Upstream Control Station) *Duration:* 14:23 to 14:43 *Depth of Water (meter):* 13.0 *Wet bulb calibration for DO meter:* 8.38 *mg/L (* 99.2 *%)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.5			12.0					
Temp. (°C)	:	24.8	24.8	Ave.: 24.8	24.7	24.7	Ave.: 24.7	24.7	24.6	Ave.: 24.7			
pH	:	7.79	7.79	Ave.: 7.79	7.82	7.81	Ave.: 7.82	7.87	7.88	Ave.: 7.88			
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0	25.1	25.0	Ave.: 25.1	25.1	25.1	Ave.: 25.1			
D.O. (mg/L)	:	6.29	6.21	Ave.: 6.25	6.15	6.18	Ave.: 6.17	6.06	6.04	Ave.: 6.05			
D.O.S. (%)	:	88.1	86.9	Ave.: 87.5	86.1	86.5	Ave.: 86.3	84.8	84.6	Ave.: 84.7		120%	130%
Turbidity (NTU)	:	3.82	3.88	Ave.: 3.85	3.62	3.60	Ave.: 3.61	3.47	3.49	Ave.: 3.48	3.65	4.38	4.75
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) *Duration:* 14:51 to 15:09 *Depth of Water (meter):* 13.8 *Wet bulb calibration for DO meter:* 8.36 *mg/L (* 99.0 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.9						12.8												
Temp. (°C)	:	24.8	24.9	Ave.: 24.9				24.7	24.8	24.8				24.7	24.7	Ave.: 24.7										
pH	:	7.80	7.80	Ave.: 7.80				7.99	7.99	7.99				7.91	7.91	Ave.: 7.91										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9				25.0	25.0	Ave.: 25.0				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.19	6.20	Ave.: 6.20	5.0	5.0	√	6.05	6.04	Ave.: 6.05	5.0	5.0	√	5.91	5.93	Ave.: 5.92	4.7	2.0	√							
D.O.S. (%)	:	86.7	86.8	Ave.: 86.8				84.7	84.6	Ave.: 84.7				82.7	83.0	Ave.: 82.9										
Turbidity (NTU)	:	3.41	3.47	Ave.: 3.44				3.70	3.76	Ave.: 3.73				3.92	3.90	Ave.: 3.91				3.69	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 *Duration:* 15:17 to 15:35 *Depth of Water (meter):* 5.2 *Wet bulb calibration for DO meter:* 8.41 *mg/L (* 99.4 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.2												
Temp. (°C)	:	24.9	24.9	Ave.: 24.9										24.7	24.8	Ave.: 24.7										
pH	:	7.75	7.76	Ave.: 7.76										7.81	7.82	Ave.: 7.82										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0						Ave.:				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.24	6.25	Ave.: 6.25	5.0	4.2	√			Ave.:	5.0	4.2		6.11	6.14	Ave.: 6.13	4.7	2.0	√							
D.O.S. (%)	:	87.4	87.5	Ave.: 87.5						Ave.:				85.5	85.9	Ave.: 85.7										
Turbidity (NTU)	:	3.28	3.30	Ave.: 3.29						Ave.:				3.40	3.39	Ave.: 3.40				3.35	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 Duration: 15:40 to 15:59 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 8.45 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	24.8	24.7	Ave.: 24.8										24.7	24.6	Ave.: 24.7										
pH	:	7.71	7.70	Ave.: 7.71										7.75	7.76	Ave.: 7.76										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0						Ave.:				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.28	6.30	Ave.: 6.29	5.0	4.2	√			Ave.:	5.0	4.2		6.12	6.10	Ave.: 6.11	4.7	2.0	√							
D.O.S. (%)	:	87.9	88.2	Ave.: 88.1						Ave.:				85.7	85.4	Ave.: 85.6										
Turbidity (NTU)	:	3.12	3.15	Ave.: 3.14						Ave.:				3.39	3.31	Ave.: 3.35				3.25	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 16:05 to 16:24 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 8.40 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.4						9.8												
Temp. (°C)	:	24.8	24.7	Ave.: 24.8				24.7	24.7	24.7				24.6	24.7	Ave.: 24.7										
pH	:	7.78	7.79	Ave.: 7.79				7.80	7.80	7.80				7.82	7.82	Ave.: 7.82										
Salinity (ppt)	:	25.0	24.9	Ave.: 25.0				25.0	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0										
D.O. (mg/L)	:	6.12	6.10	Ave.: 6.11	5.0	4.2	√	6.02	6.04	Ave.: 6.03	5.0	4.2	√	6.10	6.08	Ave.: 6.09	4.7	2.0	√							
D.O.S. (%)	:	85.7	85.4	Ave.: 85.6				84.2	84.6	Ave.: 84.4				85.4	85.1	Ave.: 85.3										
Turbidity (NTU)	:	3.91	3.93	Ave.: 3.92				3.54	3.56	Ave.: 3.55				4.11	4.13	Ave.: 4.12				3.86	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 16:29 to 16:48 Depth of Water (meter): 9.6 Wet bulb calibration for DO meter: 8.41 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.8						8.6												
Temp. (°C)	:	24.8	24.8	Ave.: 24.8				24.7	24.8	24.8				24.7	24.7	Ave.: 24.7										
pH	:	7.74	7.74	Ave.: 7.74				7.81	7.80	7.81				7.88	7.89	Ave.: 7.89										
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0										
D.O. (mg/L)	:	6.06	6.07	Ave.: 6.07	5.0	4.2	√	5.94	5.90	Ave.: 5.92	5.0	4.2	√	5.98	5.99	Ave.: 5.99	4.7	2.0	√							
D.O.S. (%)	:	84.8	85.0	Ave.: 84.9				83.2	82.6	Ave.: 82.9				83.7	83.9	Ave.: 83.8										
Turbidity (NTU)	:	3.40	3.35	Ave.: 3.38				3.27	3.23	Ave.: 3.25				3.60	3.58	Ave.: 3.59				3.41	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

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Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 16:53 to 17:11 Depth of Water (meter): 14.0 Wet bulb calibration for DO meter: 8.36 mg/L (99.0 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.0						13.0												
Temp. (°C)	:	24.7	24.7	Ave.: 24.7				24.7	24.6	24.6				24.6	24.6	Ave.: 24.6										
pH	:	7.89	7.88	Ave.: 7.89				7.99	8.00	8.00				8.01	8.01	Ave.: 8.01										
Salinity (ppt)	:	24.9	24.9	Ave.: 24.9				25.0	25.0	Ave.: 25.0				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.09	6.01	Ave. 6.05	5.0	4.2	√	6.13	6.17	Ave.: 6.15	5.0	4.2	√	6.08	6.09	Ave.: 6.09	4.7	2.0	√							
D.O.S. (%)	:	85.3	84.1	Ave.: 84.7				85.8	86.4	Ave.: 86.1				85.1	85.3	Ave.: 85.2										
Turbidity (NTU)	:	3.68	3.70	Ave.: 3.69				3.47	3.51	Ave.: 3.49				3.96	3.90	Ave.: 3.93				3.70	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 17:14 to 17:31 Depth of Water (meter): 16.6 Wet bulb calibration for DO meter: 8.40 mg/L (99.4 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.3						15.6												
Temp. (°C)	:	24.8	24.8	Ave.: 24.8				24.7	24.7	24.7				24.6	24.7	Ave.: 24.7										
pH	:	7.92	7.93	Ave.: 7.93				7.95	7.96	7.96				7.94	7.95	Ave.: 7.95										
Salinity (ppt)	:	24.9	25.0	Ave.: 25.0				25.1	25.0	Ave.: 25.1				25.1	25.1	Ave.: 25.1										
D.O. (mg/L)	:	5.99	5.94	Ave.: 5.97	5.0	4.2	√	6.08	6.10	Ave.: 6.09	5.0	4.2	√	5.84	5.88	Ave.: 5.86	4.7	2.0	√							
D.O.S. (%)	:	83.9	83.2	Ave.: 83.6				85.1	85.4	Ave.: 85.3				81.8	82.3	Ave.: 82.1										
Turbidity (NTU)	:	3.72	3.71	Ave.: 3.72				3.88	3.82	Ave.: 3.85				3.43	3.47	Ave.: 3.45				3.67	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 17:35 to 17:53 Depth of Water (meter): 22.4 Wet bulb calibration for DO meter: 8.40 mg/L (99.4 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.2			21.4				
Temp. (°C)	:	24.7	24.8	Ave.: 24.8	24.7	24.6	Ave.: 24.7	24.6	24.6	Ave.: 24.6		
pH	:	7.93	7.94	Ave.: 7.94	7.98	7.97	Ave.: 7.98	7.98	7.99	Ave.: 7.99		
Salinity (ppt)	:	25.0	25.0	Ave.: 25.0	25.1	25.0	Ave.: 25.1	25.1	25.1	Ave.: 25.1		
D.O. (mg/L)	:	5.96	6.00	Ave.: 5.98	5.82	5.88	Ave.: 5.85	5.97	5.95	Ave.: 5.96		
D.O.S. (%)	:	83.4	84.0	Ave.: 83.7	81.5	82.3	Ave.: 81.9	83.6	83.3	Ave.: 83.5		
Turbidity (NTU)	:	4.15	4.19	Ave.: 4.17	3.55	3.54	Ave.: 3.55	4.70	4.79	Ave.: 4.75	4.16	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? ~~Y~~/[✓ N] If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? ~~Y~~/[✓ N] If yes, elaboration is as follows : __________

Field Operator	S.H.Lam	Checked by		Laboratory Staff		Checked by	
Date	13-11-2013	Date	13/11/13	Date		Date	

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Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 15-11-2013 Weather Condition : Fine Ambient Temperature (°C) : 21 Sea Conditions: Calm / [✓ Small Wave] / Great Wave Tide Mode: Ebb Tide Direction of water current: From CS4 to CS6

Station: CS6 Duration: 12212 to 12228 Depth of Water (meter): 13.0 Wet bulb calibration for DO meter: 8.95 mg/L (99.7 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.5			12.0				
Temp. (°C)	:	24.0	24.1	Ave.: 24.1	24.0	24.0	Ave.: 24.0	24.1	24.1	Ave.: 24.1		
pH	:	6.84	6.82	Ave.: 6.83	6.81	6.82	Ave.: 6.82	6.85	6.86	Ave.: 6.86		
Salinity (ppt)	:	26.1	26.2	Ave.: 26.2	26.2	26.2	Ave.: 26.2	26.3	26.4	Ave.: 26.4		
D.O. (mg/L)	:	6.49	6.46	Ave.: 6.48	6.51	6.53	Ave.: 6.52	6.57	6.55	Ave.: 6.56		
D.O.S. (%)	:	89.2	88.9	Ave.: 89.1	89.6	89.9	Ave.: 89.8	90.5	90.2	Ave.: 90.4		
Turbidity (NTU)	:	7.28	7.81	Ave.: 7.55	8.07	8.32	Ave.: 8.20	8.86	8.47	Ave.: 8.67	8.14	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) Duration: 12240 to 12256 Depth of Water (meter): 13.4 Wet bulb calibration for DO meter: 8.92 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.7						12.4												
Temp. (°C)	:	24.1	24.0	Ave.: 24.1				24.0	24.0	24.0				24.1	24.1	Ave.: 24.1										
pH	:	6.87	6.86	Ave.: 6.87				6.88	6.89	6.89				6.83	6.84	Ave.: 6.84										
Salinity (ppt)	:	26.2	26.2	Ave.: 26.2				26.2	26.3	Ave.: 26.3				26.4	26.4	Ave.: 26.4										
D.O. (mg/L)	:	6.53	6.50	Ave.: 6.52	5.0	5.0	✓	6.46	6.43	Ave.: 6.45	5.0	5.0	✓	6.48	6.45	Ave.: 6.47	4.7	2.0	✓							
D.O.S. (%)	:	89.9	89.5	Ave.: 89.7				89.0	88.5	Ave.: 88.8				89.2	88.8	Ave.: 89.0										
Turbidity (NTU)	:	7.53	7.77	Ave.: 7.65				8.71	9.27	Ave.: 8.99				9.86	9.95	Ave.: 9.91				8.85	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 Duration: 11250 to 12204 Depth of Water (meter): 4.4 Wet bulb calibration for DO meter: 8.95 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.4												
Temp. (°C)	:	24.0	24.0	Ave.: 24.0										24.0	24.1	Ave.: 24.1										
pH	:	6.71	6.72	Ave.: 6.72										6.74	6.75	Ave.: 6.75										
Salinity (ppt)	:	26.1	26.1	Ave.: 26.1						Ave.:				26.1	26.2	Ave.: 26.2										
D.O. (mg/L)	:	6.70	6.72	Ave.: 6.71	5.0	4.2	✓			Ave.:	5.0	4.2		6.65	6.67	Ave.: 6.66	4.7	2.0	✓							
D.O.S. (%)	:	92.3	91.5	Ave.: 92.4						Ave.:				91.6	91.8	Ave.: 91.7										
Turbidity (NTU)	:	8.39	8.17	Ave.: 8.28						Ave.:				9.76	8.92	Ave.: 9.34				8.81	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: SR9 Duration: 11:27 to 11:42 Depth of Water (meter): 5.0 Wet bulb calibration for DO meter: 8.99 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.0												
Temp. (°C)	:	24.0	24.0	Ave.: 24.0										24.0	24.1	Ave.: 24.1										
pH	:	6.74	6.77	Ave.: 6.76										6.78	6.79	Ave.: 6.79										
Salinity (ppt)	:	26.0	26.0	Ave.: 26.0						Ave.:				26.0	26.0	Ave.: 26.0										
D.O. (mg/L)	:	6.79	6.76	Ave.: 6.78	5.0	4.2	✓			Ave.:	5.0	4.2		6.70	6.72	Ave.: 6.71	4.7	2.0	✓							
D.O.S. (%)	:	93.4	93.1	Ave.: 93.3						Ave.:				92.3	92.5	Ave.: 92.4										
Turbidity (NTU)	:	7.94	7.96	Ave.: 7.95						Ave.:				7.32	6.98	Ave.: 7.15				7.55	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 11:06 to 11:23 Depth of Water (meter): 9.2 Wet bulb calibration for DO meter: 9.00 mg/L (99.8 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.6						8.2												
Temp. (°C)	:	24.0	24.1	Ave.: 24.1				24.1	24.1	24.1				24.2	24.1	Ave.: 24.2										
pH	:	6.90	6.88	Ave.: 6.89				6.86	6.85	6.86				6.89	6.90	Ave.: 6.90										
Salinity (ppt)	:	26.0	26.1	Ave.: 26.1				26.1	26.0	Ave.: 26.1				26.1	26.1	Ave.: 26.1										
D.O. (mg/L)	:	6.53	6.55	Ave.: 6.54	5.0	4.2	✓	6.58	6.59	Ave.: 6.59	5.0	4.2	✓	6.63	6.64	Ave.: 6.64	4.7	2.0	✓							
D.O.S. (%)	:	89.9	90.2	Ave.: 90.1				90.6	90.8	Ave.: 90.7				91.3	91.5	Ave.: 91.4										
Turbidity (NTU)	:	7.34	7.39	Ave.: 7.37				8.08	8.42	Ave.: 8.25				7.93	7.25	Ave.: 7.59				7.74	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 10:43 to 11:02 Depth of Water (meter): 9.0 Wet bulb calibration for DO meter: 8.96 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.5						8.0												
Temp. (°C)	:	24.1	24.1	Ave.: 24.1				24.1	24.1	24.1				24.1	24.2	Ave.: 24.2										
pH	:	6.87	6.88	Ave.: 6.88				6.89	6.88	6.89				6.91	6.90	Ave.: 6.91										
Salinity (ppt)	:	26.0	26.0	Ave.: 26.0				26.0	26.0	Ave.: 26.0				26.1	26.1	Ave.: 26.1										
D.O. (mg/L)	:	6.57	6.60	Ave.: 6.59	5.0	4.2	✓	6.64	6.63	Ave.: 6.64	5.0	4.2	✓	6.70	6.68	Ave.: 6.69	4.7	2.0	✓							
D.O.S. (%)	:	90.5	90.9	Ave.: 90.7				91.4	91.2	Ave.: 91.3				92.3	92.0	Ave.: 92.2										
Turbidity (NTU)	:	7.15	7.49	Ave.: 7.32				7.71	7.43	Ave.: 7.57				8.43	8.11	Ave.: 8.27				7.72	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Station: IS12 Duration: 10:17 to 10:35 Depth of Water (meter): 16.0 Wet bulb calibration for DO meter: 8.96 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.0						15.0												
Temp. (°C)	:	24.1	24.2	Ave.: 24.2				24.1	24.1	24.1				24.1	24.0	Ave.: 24.1										
pH	:	6.90	6.87	Ave.: 6.89				6.84	6.85	6.85				6.88	6.91	Ave.: 6.90										
Salinity (ppt)	:	26.0	26.1	Ave.: 26.1				26.1	26.1	Ave.: 26.1				26.2	26.3	Ave.: 26.3										
D.O. (mg/L)	:	6.56	6.54	Ave.: 6.55	5.0	4.2	✓	6.60	6.61	Ave.: 6.61	5.0	4.2	✓	6.48	6.45	Ave.: 6.47	4.7	2.0	✓							
D.O.S. (%)	:	90.5	90.1	Ave.: 90.3				90.9	91.1	Ave.: 91.0				89.2	88.8	Ave.: 89.0										
Turbidity (NTU)	:	8.33	7.58	Ave.: 7.96				8.30	7.38	Ave.: 7.84				8.59	8.87	Ave.: 8.73				8.18	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 9:54 to 10:12 Depth of Water (meter): 15.6 Wet bulb calibration for DO meter: 9.02 mg/L (99.2 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.8						14.6												
Temp. (°C)	:	24.1	24.1	Ave.: 24.1				24.1	24.1	24.1				24.1	24.0	Ave.: 24.1										
pH	:	6.86	6.85	Ave.: 6.86				6.87	6.89	6.88				6.90	6.89	Ave.: 6.90										
Salinity (ppt)	:	26.1	26.1	Ave.: 26.1				26.1	26.2	Ave.: 26.2				26.2	26.2	Ave.: 26.2										
D.O. (mg/L)	:	6.51	6.53	Ave.: 6.52	5.0	4.2	✓	6.57	6.59	Ave.: 6.58	5.0	4.2	✓	6.41	6.40	Ave.: 6.41	4.7	2.0	✓							
D.O.S. (%)	:	89.6	89.9	Ave.: 99.8				90.5	90.7	Ave.: 90.6				88.2	88.0	Ave.: 88.1										
Turbidity (NTU)	:	8.75	8.26	Ave.: 8.51				8.97	8.27	Ave.: 8.62				9.48	8.79	Ave.: 9.14				8.76	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 9:30 to 9:47 Depth of Water (meter): 22.4 Wet bulb calibration for DO meter: 8.97 mg/L (99.4 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.2			21.4					
Temp. (°C)	:	23.9	23.9	Ave.: 23.9	23.9	24.0	Ave.: 24.0	24.0	24.1	Ave.: 24.1			
pH	:	6.93	6.96	Ave.: 6.95	6.97	6.99	Ave.: 6.98	7.01	7.00	Ave.: 7.01			
Salinity (ppt)	:	25.5	25.6	Ave.: 25.6	25.8	25.9	Ave.: 25.9	26.0	26.1	Ave.: 26.1			
D.O. (mg/L)	:	6.82	6.85	Ave.: 6.84	6.74	6.71	Ave.: 6.73	6.60	6.57	Ave.: 6.85			
D.O.S. (%)	:	93.7	94.2	Ave.: 94.0	92.8	92.4	Ave.: 92.6	90.9	90.5	Ave.: 90.7		120%	130%
Turbidity (NTU)	:	5.69	5.51	Ave.: 5.60	5.85	6.70	Ave.: 6.28	7.14	7.79	Ave.: 7.47	6.45	7.74	8.39
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? Y [✓ N] If yes, elaboration is as follows:

Any notable pollutant by others near monitoring site ? Y [✓ N] If yes, elaboration is as follows :

Field Operator	K. M. Kwan	Checked by		Laboratory Staff		Checked by	
Date	15-11-2013	Date	15/11/13	Date		Date	

Sampling Date : 15.11.2013 Weather Condition : Fine Ambient Temperature (°C) : 22 Sea Conditions: ~~Calm~~ / Small Wave / ~~Great Wave~~ Tide Mode: Flood Tide Direction of water current: From CS6 to CS4

Station: CS6 (Upstream Control Station) Duration: 15:29 to 15:45 Depth of Water (meter): 13.4 Wet bulb calibration for DO meter: 8.95 mg/L (99.7 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.7			124					
Temp. (°C)	:	24.1	24.2	Ave.: 24.2	24.1	24.0	Ave.: 24.1	24.2	24.2	Ave.: 24.2			
pH	:	6.87	6.85	Ave.: 6.86	6.84	6.86	Ave.: 6.85	6.88	6.89	Ave.: 6.89			
Salinity (ppt)	:	26.2	26.1	Ave.: 26.2	26.2	26.3	Ave.: 26.3	26.4	26.3	Ave.: 26.4			
D.O. (mg/L)	:	6.58	6.55	Ave.: 6.57	6.60	6.62	Ave.: 6.61	6.66	6.64	Ave.: 6.65			
D.O.S. (%)	:	90.5	90.2	Ave.: 90.4	90.9	91.2	Ave.: 91.1	91.8	91.4	Ave.: 91.6		120%	130%
Turbidity (NTU)	:	7.20	7.79	Ave.: 7.50	8.01	8.23	Ave.: 8.12	8.77	8.38	Ave.: 8.58	8.06	9.68	10.48
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) Duration: 15:57 to 16:13 Depth of Water (meter): 13.8 Wet bulb calibration for DO meter: 8.92 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.9						12.8												
Temp. (°C)	:	24.2	24.1	Ave.: 24.2				24.1	24.0	24.1				24.0	24.1	Ave.: 24.1										
pH	:	6.90	6.89	Ave.: 6.90				6.91	6.93	6.92				6.86	6.87	Ave.: 6.87										
Salinity (ppt)	:	26.3	26.2	Ave.: 26.3				26.3	26.4	Ave.: 26.4				26.5	26.4	Ave.: 26.5										
D.O. (mg/L)	:	6.62	6.59	Ave.: 6.61	5.0	5.0	✓	6.55	6.52	Ave.: 6.54	5.0	5.0	✓	6.57	6.54	Ave.: 6.56	4.7	2.0	✓							
D.O.S. (%)	:	91.2	90.8	Ave.: 91.0				90.3	89.9	Ave.: 90.1				90.5	90.1	Ave.: 90.3										
Turbidity (NTU)	:	7.45	7.69	Ave.: 7.57				8.63	9.18	Ave.: 8.91				9.77	9.87	Ave.: 9.82				8.77	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 Duration: 16:19 to 16:33 Depth of Water (meter): 4.8 Wet bulb calibration for DO meter: 8.95 mg/L (99.7 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.8												
Temp. (°C)	:	24.1	24.0	Ave.: 24.1										24.1	24.1	Ave.: 24.1										
pH	:	6.74	6.75	Ave.: 6.75										6.77	6.78	Ave.: 6.78										
Salinity (ppt)	:	26.1	26.2	Ave.: 26.2						Ave.:				26.2	26.3	Ave.: 26.3										
D.O. (mg/L)	:	6.79	6.80	Ave.: 6.80	5.0	4.2	✓			Ave.:	5.0	4.2		6.73	6.75	Ave.: 6.74	4.7	2.0	✓							
D.O.S. (%)	:	93.6	93.7	Ave.: 93.7						Ave.:				92.7	93.1	Ave.: 92.9										
Turbidity (NTU)	:	8.30	8.08	Ave.: 8.19						Ave.:				9.67	8.83	Ave.: 9.27				8.72	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

東業德勤測試顧問有限公司
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Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 *Duration:* 16:41 *to* 16:56 *Depth of Water (meter):* 5.4 *Wet bulb calibration for DO meter:* 8.99 *mg/L (* 99.7 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.4												
Temp. (°C)	:	24.0	24.1	Ave.: 24.1										24.1	24.2	Ave.: 24.2										
pH	:	6.77	6.80	Ave.: 6.87										6.81	6.82	Ave.: 6.82										
Salinity (ppt)	:	26.1	26.0	Ave.: 26.1						Ave.:				26.1	26.1	Ave.: 26.1										
D.O. (mg/L)	:	6.88	6.85	Ave.: 6.87	5.0	4.2	✓			Ave.:	5.0	4.2		6.79	6.81	Ave.: 6.80	4.7	2.0	✓							
D.O.S. (%)	:	94.7	94.3	Ave.: 94.5						Ave.:				93.6	93.8	Ave.: 93.7										
Turbidity (NTU)	:	7.89	7.91	Ave.: 7.90						Ave.:				7.23	6.93	Ave.: 7.08				7.49	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 *Duration:* 17:00 *to* 17:17 *Depth of Water (meter):* 9.6 *Wet bulb calibration for DO meter:* 9.00 *mg/L (* 99.8 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.8						8.6												
Temp. (°C)	:	24.0	24.1	Ave.: 24.1				24.2	24.2	24.2				24.3	24.2	Ave.: 24.3										
pH	:	6.93	6.91	Ave.: 6.92				6.89	6.88	6.89				6.92	6.93	Ave.: 6.93										
Salinity (ppt)	:	26.1	26.2	Ave.: 26.2				26.2	26.1	Ave.: 26.2				26.2	26.3	Ave.: 26.3										
D.O. (mg/L)	:	6.62	6.64	Ave.: 6.63	5.0	4.2	✓	6.67	6.88	Ave.: 6.68	5.0	4.2	✓	6.72	6.73	Ave.: 6.73	4.7	2.0	✓							
D.O.S. (%)	:	91.2	91.5	Ave.: 91.4				91.8	92.1	Ave.: 92.0				92.6	92.7	Ave.: 92.7										
Turbidity (NTU)	:	7.27	7.32	Ave.: 7.30				8.02	8.35	Ave.: 81.9				7.26	7.17	Ave.: 7.52				7.67	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 *Duration:* 17:22 *to* 17:41 *Depth of Water (meter):* 9.2 *Wet bulb calibration for DO meter:* 8.96 *mg/L (* 99.6 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.6						8.2												
Temp. (°C)	:	24.1	24.2	Ave.: 24.2				24.2	24.1	24.2				24.3	24.2	Ave.: 24.3										
pH	:	6.90	6.91	Ave.: 6.91				6.92	6.94	6.93				6.95	6.93	Ave.: 6.94										
Salinity (ppt)	:	26.1	26.0	Ave.: 26.1				26.1	26.2	Ave.: 26.2				26.2	26.2	Ave.: 26.2										
D.O. (mg/L)	:	6.66	6.69	Ave.: 6.68	5.0	4.2	✓	6.73	6.72	Ave.: 6.73	5.0	4.2	✓	6.79	6.77	Ave.: 6.78	4.7	2.0	✓							
D.O.S. (%)	:	91.8	92.3	Ave.: 92.1				92.7	92.5	Ave.: 92.6				93.6	93.3	Ave.: 93.5										
Turbidity (NTU)	:	7.08	7.41	Ave.: 7.25				7.64	7.36	Ave.: 7.50				8.35	8.09	Ave.: 8.22				7.66	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Station: IS12 Duration: 17:49 to 18:07 Depth of Water (meter): 16.4 Wet bulb calibration for DO meter: 8.96 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.2						15.4												
Temp. (°C)	:	24.2	24.3	Ave.: 24.3				24.1	24.0	24.1				24.0	24.0	Ave.: 24.0										
pH	:	6.93	6.90	Ave.: 6.92				6.87	6.88	6.88				6.91	6.94	Ave.: 6.93										
Salinity (ppt)	:	26.1	26.2	Ave.: 26.2				26.2	26.2	Ave.: 26.2				26.4	26.3	Ave.: 26.4										
D.O. (mg/L)	:	6.65	6.63	Ave.: 6.64	5.0	4.2	✓	6.69	6.70	Ave.: 6.70	5.0	4.2	✓	6.57	6.54	Ave.: 656	4.7	2.0	✓							
D.O.S. (%)	:	91.8	91.4	Ave.: 91.6				92.2	92.4	Ave.: 92.3				90.5	90.1	Ave.: 90.3										
Turbidity (NTU)	:	8.28	7.53	Ave.: 7.91				8.25	7.33	Ave.: 7.79				8.54	8.79	Ave.: 8.67				8.12	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 18:12 to 18:30 Depth of Water (meter): 15.8 Wet bulb calibration for DO meter: 9.02 mg/L (99.2 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.9						14.8												
Temp. (°C)	:	24.1	24.1	Ave.: 24.1				24.2	24.1	24.2				24.2	24.3	Ave.: 24.3										
pH	:	6.89	6.88	Ave.: 6.89				6.90	6.92	6.91				6.93	6.92	Ave.: 6.93										
Salinity (ppt)	:	26.1	26.2	Ave.: 26.2				26.3	26.2	Ave.: 26.3				26.3	26.2	Ave.: 26.3										
D.O. (mg/L)	:	6.60	6.62	Ave.: 6.61	5.0	4.2		6.66	6.68	Ave.: 6.67	5.0	4.2		6.50	6.49	Ave.: 6.50	4.7	2.0								
D.O.S. (%)	:	90.9	91.2	Ave.:				91.8	92.1	Ave.:				89.5	89.4	Ave.:										
Turbidity (NTU)	:	8.67	8.21	Ave.: 8.44				8.89	8.22	Ave.: 8.56				9.40	8.71	Ave.: 9.06				8.68	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 18:37 to 18:59 Depth of Water (meter): 22.8 Wet bulb calibration for DO meter: 8.87 mg/L (99.4 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.4			21.8				
Temp. (°C)	:	24.0	23.8	Ave.: 24.0	24.0	24.1	Ave.: 24.1	24.1	24.2	Ave.: 24.2		
pH	:	6.96	6.99	Ave.: 6.98	7.00	7.02	Ave.: 7.02	7.04	7.03	Ave.: 7.04		
Salinity (ppt)	:	25.6	25.7	Ave.: 25.7	25.9	25.8	Ave.: 25.9	26.1	26.1	Ave.: 26.1		
D.O. (mg/L)	:	6.91	6.94	Ave.: 6.93	6.83	6.80	Ave.: 6.82	6.69	6.66	Ave.: 6.68		
D.O.S. (%)	:	95.0	95.5	Ave.: 95.3	94.1	93.7	Ave.: 93.9	92.2	91.8	Ave.: 92.0		
Turbidity (NTU)	:	5.68	5.43	Ave.: 5.56	5.77	6.62	Ave.: 6.20	7.08	7.71	Ave.: 7.40	6.38	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? ~~Y~~/N If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? ~~Y~~/N If yes, elaboration is as follows : __________

Field Operator	Jacky Cheung	Checked by		Laboratory Staff		Checked by	
Date	15. 11. 2013	Date	15/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Ebb Conditio.,**

Sampling Date : 18.11.2013 Weather Condition : Fine Ambient Temperature (°C) : 24 Sea Conditions: ~~Calm~~ / Small Wave / ~~Great Wave~~ Tide Mode: Ebb Tide Direction of water current: From CS4 to CS6

Station: CS6 Duration: 14:50 to 15:01 Depth of Water (meter): 12.2 Wet bulb calibration for DO meter: 8.92 mg/L (99.6 %) (25 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.1			11.2				
Temp. (°C)	:	24.2	24.1	Ave.: 24.2	24.1	24.0	Ave.: 24.1	24.0	24.1	Ave.: 24.1		
pH	:	7.18	7.21	Ave.: 7.20	7.25	7.24	Ave.: 7.25	7.28	7.31	Ave.: 7.29		
Salinity (ppt)	:	26.1	26.2	Ave.: 26.2	26.2	26.1	Ave.: 26.2	26.2	26.3	Ave.: 26.3		
D.O. (mg/L)	:	6.48	6.45	Ave.: 6.47	6.41	6.39	Ave.: 6.40	6.50	6.52	Ave.: 6.51		
D.O.S. (%)	:	89.3	88.8	Ave.: 89.1	88.3	88.0	Ave.: 88.2	89.5	89.8	Ave.: 89.7		
Turbidity (NTU)	:	6.72	7.20	Ave.: 6.96	6.83	6.52	Ave.: 6.68	6.67	6.55	Ave.: 6.61	6.75	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) Duration: 14:31 to 14:45 Depth of Water (meter): 13.4 Wet bulb calibration for DO meter: 8.94 mg/L (99.5 %) (25 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.7						12.4												
Temp. (°C)	:	24.1	24.2	Ave.: 24.2				24.2	24.3	24.3				24.3	24.3	Ave.: 24.3										
pH	:	7.28	7.26	Ave.: 7.27				7.31	7.32	7.32				7.35	7.37	Ave.: 7.36										
Salinity (ppt)	:	26.2	26.1	Ave.: 26.2				26.2	26.3	Ave.: 26.3				26.4	26.3	Ave.: 26.4										
D.O. (mg/L)	:	6.52	6.50	Ave.: 6.51	5.0	5.0	✓	6.45	6.43	Ave.: 6.44	5.0	5.0	✓	6.38	6.26	Ave.: 6.32	4.7	2.0	✓							
D.O.S. (%)	:	89.9	89.6	Ave.: 89.8				88.9	88.6	Ave.: 88.8				87.9	86.3	Ave.: 87.1										
Turbidity (NTU)	:	6.84	7.23	Ave.: 7.04				6.41	6.77	Ave.: 6.59				6.94	6.76	Ave.: 6.85				6.83	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 Duration: 14:11 to 14:26 Depth of Water (meter): 5.0 Wet bulb calibration for DO meter: 8.97 mg/L (99.8 %) (25 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.0												
Temp. (°C)	:	24.1	24.0	Ave.: 24.1										24.2	24.2	Ave.: 24.2										
pH	:	7.16	7.19	Ave.: 7.18										7.21	7.22	Ave.: 7.22										
Salinity (ppt)	:	26.1	26.1	Ave.: 26.1						Ave.:				26.1	26.2	Ave.: 26.2										
D.O. (mg/L)	:	6.73	6.70	Ave.: 6.72	5.0	4.2	✓			Ave.:	5.0	4.2		6.67	6.64	Ave.: 6.66	4.7	2.0	✓							
D.O.S. (%)	:	92.7	92.3	Ave.: 92.5						Ave.:				91.9	91.5	Ave.: 91.7										
Turbidity (NTU)	:	7.04	7.13	Ave.: 7.09						Ave.:				7.47	7.41	Ave.: 7.44				7.26	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Conditio**n**)**

Station: SR9 Duration: 13:48 to 14:06 Depth of Water (meter): 5.6 Wet bulb calibration for DO meter: 8.95 mg/L (99.6 %) (25 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	24.2	24.2	Ave.: 24.2										24.1	24.2	Ave.: 24.2										
pH	:	7.16	7.18	Ave.: 7.17										7.21	7.22	Ave.: 7.22										
Salinity (ppt)	:	26.0	25.9	Ave.: 26.0						Ave.:				26.0	26.1	Ave.: 26.1										
D.O. (mg/L)	:	6.79	6.76	Ave.: 6.78	5.0	4.2	✓			Ave.:	5.0	4.2		6.72	6.70	Ave.: 6.71	4.7	2.0	✓							
D.O.S. (%)	:	93.5	93.1	Ave.: 93.3						Ave.:				92.6	92.4	Ave.: 92.5										
Turbidity (NTU)	:	7.84	7.33	Ave.: 7.59						Ave.:				8.14	8.28	Ave.: 8.21				7.90	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 13:09 to 13:28 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 8.91 mg/L (99.2 %) (25.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.4						9.8												
Temp. (°C)	:	24.2	24.1	Ave.: 24.2				24.2	24.2	24.2				24.2	24.1	Ave.: 24.2										
pH	:	7.25	7.27	Ave.: 7.26				7.29	7.30	7.30				7.32	7.34	Ave.: 7.33										
Salinity (ppt)	:	26.0	26.1	Ave.: 26.1				26.3	26.2	Ave.: 26.3				26.3	26.3	Ave.: 26.3										
D.O. (mg/L)	:	6.53	6.55	Ave.: 6.61	5.0	4.2	✓	6.51	6.49	Ave.: 6.50	5.0	4.2	✓	6.42	6.39	Ave.: 6.41	4.7	2.0	✓							
D.O.S. (%)	:	90.0	90.3	Ave.: 90.2				89.7	89.4	Ave.: 89.6				88.5	88.0	Ave.: 88.3										
Turbidity (NTU)	:	9.99	8.13	Ave.: 9.06				10.9	9.52	Ave.: 10.2				10.6	10.1	Ave.: 10.4				9.87	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: ~~12:46~~ 12:50 to 13:04 Depth of Water (meter): 9.2 Wet bulb calibration for DO meter: 8.93 mg/L (99.5 %) (25 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.6						8.2												
Temp. (°C)	:	24.1	24.2	Ave.: 24.2				24.2	24.1	24.2				24.2	24.3	Ave.: 24.3										
pH	:	7.11	7.14	Ave.: 7.13				7.19	7.17	7.18				7.24	7.22	Ave.: 7.23										
Salinity (ppt)	:	26.1	26.1	Ave.: 26.1				26.2	26.1	Ave.: 26.2				26.2	26.3	Ave.: 26.3										
D.O. (mg/L)	:	6.62	6.60	Ave.: 6.61	5.0	4.2	✓	6.57	6.56	Ave.: 6.57	5.0	4.2	✓	6.50	6.52	Ave.: 6.51	4.7	2.0	✓							
D.O.S. (%)	:	91.2	90.9	Ave.: 91.1				90.5	90.3	Ave.: 90.4				89.6	89.8	Ave.: 89.7										
Turbidity (NTU)	:	8.09	8.47	Ave.: 8.28				9.77	11.2	Ave.: 10.5				11.9	11.5	Ave.: 11.7				10.2	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Conditio..)**

Station: IS12 Duration: ~~12:41~~ 12:27 to ~~12:59~~ 12:45 Depth of Water (meter): 13.8 Wet bulb calibration for DO meter: 8.89 mg/L (99.3 %) (25.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.9						12.8												
Temp. (°C)	:	24.3	24.3	Ave.: 24.3				24.1	24.2	24.2				24.1	24.1	Ave.: 24.1										
pH	:	7.21	7.19	Ave.: 7.20				7.24	7.25	7.25				7.27.	7.28	Ave.: 7.28										
Salinity (ppt)	:	26.1	26.2	Ave.: 26.2				26.3	26.2	Ave.: 26.3				26.3	26.4	Ave.: 26.4										
D.O. (mg/L)	:	6.65	6.61	Ave.: 6.68	5.0	4.2	✓	6.59	6.53	Ave.: 6.56	5.0	4.2	✓	6.35	6.38	Ave.: 6.37	4.7	2.0	✓							
D.O.S. (%)	:	91.5.	91.1	Ave.: 91.3				90.7	88.9	Ave.: 90.3				87.5	87.9	Ave.: 87.7										
Turbidity (NTU)	:	7.76	7.40	Ave.: 7.58				8.77	8.58	Ave.: 8.68				9.53	8.94	Ave.: 9.24				8.50	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 12:04 to 12:22 Depth of Water (meter): 15.8 Wet bulb calibration for DO meter: 8.95 mg/L (99.5 %) (25 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.9						14.8												
Temp. (°C)	:	24.2	24.1	Ave.: 24.2				24.2	24.2	24.2				24.0	24.1	Ave.: 24.1										
pH	:	7.23	7.24	Ave.: 7.24				7.26	7.28	7.27				7.31	7.32	Ave.: 7.32										
Salinity (ppt)	:	26.2	26.1	Ave.: 26.2				26.2	26.3	Ave.: 26.3				26.4	26.3	Ave.: 26.4										
D.O. (mg/L)	:	6.58	6.62	Ave.: 6.60	5.0	4.2	✓	6.50	6.47	Ave.: 6.49	5.0	4.2	✓	6.33	6.34	Ave.: 6.34	4.7	2.0	✓							
D.O.S. (%)	:	90.7	91.2	Ave.: 91.0				89.6	89.2	Ave.: 89.4				87.2	87.0	Ave.: 87.1										
Turbidity (NTU)	:	8.06	8.52	Ave.: 8.29				7.33	8.44	Ave.: 7.89				8.59	8.31	Ave.: 8.45				8.21	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 11:31 to 11:49 Depth of Water (meter): 22.2 Wet bulb calibration for DO meter: 8.91 mg/L (99.7 %) (25 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.1			21.2					
Temp. (°C)	:	24.2	24.2	Ave.: 24.2	24.1	24.0	Ave.: 24.1	24.0	23.8	Ave.: 24.0			
pH	:	7.28	7.30	Ave.: 7.29	7.34	7.32	Ave.: 7.33	7.37	7.36	Ave.: 7.37			
Salinity (ppt)	:	25.8	25.7	Ave.: 25.8	25.8	25.9	Ave.: 25.9	26.0	26.1	Ave.: 26.1			
D.O. (mg/L)	:	6.83	6.81	Ave.: 6.82	6.73	6.72	Ave.: 6.73	6.58	6.55	Ave.: 6.57			
D.O.S. (%)	:	94.2	93.8	Ave.: 94.0	92.7	92.5	Ave.: 92.6	90.6	90.3	Ave.: 90.5		120%	130%
Turbidity (NTU)	:	11.5	12.3	Ave.: 11.9	9.14	8.91	Ave.: 9.03	9.35	9.42	Ave.: 93.9	10.1	12.1	13.1
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? ~~Y~~ / N If yes, elaboration is as follows: ______

Any notable pollutant by others near monitoring site ? ~~Y~~ / N If yes, elaboration is as follows : ______

Field Operator	Jacky Cheung	Checked by		Laboratory Staff		Checked by	
Date	18. 11. 2013	Date		Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 18-11-2013 *Weather Condition :* Fine *Ambient Temperature (°C) :* 24 *Sea Conditions: Calm / [✓ Small Wave] / Great Wave* *Tide Mode: Flood Tide* *Direction of water current: From CS6 to CS4*

Station: CS6 (Upstream Control Station) *Duration:* 17:25 *to* 17:43 *Depth of Water (meter):* 12.6 *Wet bulb calibration for DO meter:* 8.92 *mg/L (* 99.6 *%)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.3			11.6					
Temp. (°C)	:	24.3	24.2	Ave.: 24.3	24.2	24.2	Ave.: 24.2	24.1	24.1	Ave.: 24.1			
pH	:	7.21	7.24	Ave.: 7.23	7.28	7.27	Ave.: 7.28	7.31	7.34	Ave.: 7.33			
Salinity (ppt)	:	26.3	26.2	Ave.: 26.3	26.3	26.3	Ave.: 26.3	26.4	26.4	Ave.: 26.4			
D.O. (mg/L)	:	6.57	6.54	Ave.: 6.56	6.50	6.48	Ave.: 6.49	6.59	6.61	Ave.: 6.60			
D.O.S. (%)	:	90.6	90.1	Ave.: 90.4	89.6	89.3	Ave.: 89.5	90.8	91.1	Ave.: 91.0		120%	130%
Turbidity (NTU)	:	6.57	7.05	Ave.: 6.81	6.68	6.37	Ave.: 6.53	6.52	6.40	Ave.: 6.46	6.60	7.92	8.58
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) *Duration:* 16:55 *to* 17:13 *Depth of Water (meter):* 13.6 *Wet bulb calibration for DO meter:* 8.94 *mg/L (* 99.5 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.8						12.6												
Temp. (°C)	:	24.3	24.3	Ave.: 24.3				24.3	24.2	24.3				24.2	24.2	Ave.: 24.2										
pH	:	7.31	7.29	Ave.: 7.30				7.34	7.35	7.35				7.38	7.40	Ave.: 7.39										
Salinity (ppt)	:	26.3	26.3	Ave.: 26.3				26.3	26.4	Ave.: 26.4				26.4	26.5	Ave.: 26.5										
D.O. (mg/L)	:	6.61	6.59	Ave.: 6.60	5.0	5.0	✓	6.54	6.52	Ave.: 6.53	5.0	5.0	✓	6.43	6.41	Ave.: 6.42	4.7	2.0	✓							
D.O.S. (%)	:	91.2	90.9	Ave.: 91.1				90.2	89.9	Ave.: 90.1				88.7	88.4	Ave.: 88.6										
Turbidity (NTU)	:	6.69	7.08	Ave.: 6.89				6.26	6.32	Ave.: 6.29				6.79	6.61	Ave.: 6.70				6.63	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 *Duration:* 17:51 *to* 18:04 *Depth of Water (meter):* 5.4 *Wet bulb calibration for DO meter:* 8.97 *mg/L (* 99.8 *%)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.4												
Temp. (°C)	:	24.2	24.2	Ave.: 24.2										24.2	24.3	Ave.: 24.3										
pH	:	7.19	7.22	Ave.: 7.21										7.24	7.25	Ave.: 7.25										
Salinity (ppt)	:	26.2	26.3	Ave.: 26.3						Ave.:				26.3	26.3	Ave.: 26.3										
D.O. (mg/L)	:	6.82	6.79	Ave.: 6.81	5.0	4.2	✓			Ave.:	5.0	4.2		6.76	6.73	Ave.: 6.75	4.7	2.0	✓							
D.O.S. (%)	:	94.0	93.6	Ave.: 93.8						Ave.:				93.2	92.8	Ave.: 93.0										
Turbidity (NTU)	:	6.89	6.98	Ave.: 6.94						Ave.:				7.32	7.26	Ave.: 7.29				7.12	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 Duration: 1821 to 1827 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 8.95 mg/L (99.6 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	24.2	24.3	Ave.: 24.3										24.2	24.2	Ave.: 24.2										
pH	:	7.19	7.21	Ave.: 7.20										7.24	7.25	Ave.: 7.25										
Salinity (ppt)	:	26.1	26.1	Ave.: 26.1						Ave.:				26.1	26.1	Ave.: 26.1										
D.O. (mg/L)	:	6.88	6.85	Ave.: 6.87	5.0	4.2	✓			Ave.:	5.0	4.2		6.81	6.79	Ave.: 6.80	4.7	2.0	✓							
D.O.S. (%)	:	94.8	94.4	Ave.: 94.6						Ave.:				93.9	93.6	Ave.: 93.8										
Turbidity (NTU)	:	7.69	7.18	Ave.: 7.44						Ave.:				7.98	8.13	Ave.: 8.06				7.75	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 1832 to 1851 Depth of Water (meter): 11.0 Wet bulb calibration for DO meter: 8.91 mg/L (99.2 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.5						10.0												
Temp. (°C)	:	24.3	24.3	Ave.: 24.3				24.3	24.3	24.3				24.2	24.2	Ave.: 24.2										
pH	:	7.28	7.30	Ave.: 7.29				7.32	7.33	7.33				7.35	7.37	Ave.: 7.36										
Salinity (ppt)	:	26.2	26.2	Ave.: 26.2				26.2	26.3	Ave.: 26.3				26.3	26.4	Ave.: 26.4										
D.O. (mg/L)	:	6.62	6.64	Ave.: 6.63	5.0	4.2	✓	6.60	6.58	Ave.: 6.59	5.0	4.2	✓	6.51	6.48	Ave.: 6.50	4.7	2.0	✓							
D.O.S. (%)	:	91.3	91.5	Ave.: 91.4				91.0	90.7	Ave.: 90.9				89.8	89.3	Ave.: 89.6										
Turbidity (NTU)	:	9.84	7.98	Ave.: 8.91				10.4	9.37	Ave.: 9.89				10.12	9.85	Ave.: 10.03				9.61	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 1855 to 1912 Depth of Water (meter): 9.8 Wet bulb calibration for DO meter: 8.93 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.9						8.8												
Temp. (°C)	:	24.3	24.3	Ave.: 24.3				24.3	24.3	24.3				24.3	24.2	Ave.: 24.3										
pH	:	7.14	7.17	Ave.: 7.16				7.22	7.20	7.21				7.27	7.25	Ave.: 7.26										
Salinity (ppt)	:	26.1	26.2	Ave.: 26.2				26.2	26.2	Ave.: 26.2				26.2	26.3	Ave.: 26.3										
D.O. (mg/L)	:	6.71	6.69	Ave.: 6.70	5.0	4.2	✓	6.66	6.65	Ave.: 6.66	5.0	4.2	✓	6.59	6.61	Ave.: 6.60	4.7	2.0	✓							
D.O.S. (%)	:	92.5	92.3	Ave.: 92.4				91.8	91.6	Ave.: 91.7				90.9	91.2	Ave.: 91.1										
Turbidity (NTU)	:	7.94	8.32	Ave.: 8.13				9.62	10.7	Ave.: 10.16				11.4	11.0	Ave.: 11.2				9.83	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Co..dition)**

Station: IS12 Duration: 19:27 to 19:35 Depth of Water (meter): 14.4 Wet bulb calibration for DO meter: 8.89 mg/L (99.3 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.2						13.4												
Temp. (°C)	:	24.3	24.4	Ave.: 24.4				24.2	24.2	24.2				24.2	24.1	Ave.: 24.2										
pH	:	7.24	7.22	Ave.: 7.23				7.27	7.28	7.28				7.30	7.31	Ave.: 7.31										
Salinity (ppt)	:	26.3	26.2	Ave.: 26.3				26.3	26.4	Ave.: 26.4				26.4	26.4	Ave.: 26.4										
D.O. (mg/L)	:	6.73	6.70	Ave.: 6.72	5.0	4.2	✓	6.65	6.62	Ave.: 6.64	5.0	4.2	✓	6.44	6.47	Ave.: 6.46	4.7	2.0	✓							
D.O.S. (%)	:	92.8	92.3	Ave.: 92.6				91.7	91.2	Ave.: 91.5				88.8	89.2	Ave.: 89.0										
Turbidity (NTU)	:	7.68	7.32	Ave.: 7.50				8.62	8.43	Ave.: 8.53				9.38	8.76	Ave.: 9.07				8.37	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 19:40 to 19:58 Depth of Water (meter): 16.4 Wet bulb calibration for DO meter: 8.95 mg/L (99.5 %)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.2						15.4												
Temp. (°C)	:	24.3	24.3	Ave.: 24.3				24.3	24.2	24.3				24.2	24.1	Ave.: 24.2										
pH	:	7.27	7.28	Ave.: 7.28				7.30	7.32	7.31				7.34	7.35	Ave.: 7.35										
Salinity (ppt)	:	26.3	26.3	Ave.: 26.3				26.4	26.4	Ave.: 26.4				26.4	26.4	Ave.: 26.4										
D.O. (mg/L)	:	6.67	6.71	Ave.: 6.69	5.0	4.2	✓	6.59	6.56	Ave.: 6.58	5.0	4.2	✓	6.42	6.43	Ave.: 6.43	4.7	2.0	✓							
D.O.S. (%)	:	92.0	92.5	Ave.: 92.3				90.9	90.5	Ave.: 90.7				88.5	88.7	Ave.: 88.6										
Turbidity (NTU)	:	7.98	8.44	Ave.: 8.21				7.18	8.29	Ave.: 7.74				8.44	8.16	Ave.: 8.30				8.08	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 20:07 to 20:25 Depth of Water (meter): 22.6 Wet bulb calibration for DO meter: 8.91 mg/L (99.7 %)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.3			21.6				
Temp. (°C)	:	24.3	24.3	Ave.: 24.3	24.2	24.2	Ave.: 24.2	24.1	24.0	Ave.: 24.0		
pH	:	7.31	7.33	Ave.: 7.32	7.37	7.35	Ave.: 7.36	7.40	7.39	Ave.: 7.40		
Salinity (ppt)	:	25.8	25.9	Ave.: 25.9	25.9	26.0	Ave.: 26.0	26.2	26.2	Ave.: 26.2		
D.O. (mg/L)	:	6.92	6.90	Ave.: 6.92	6.82	6.81	Ave.: 6.82	6.67	6.64	Ave.: 6.66		
D.O.S. (%)	:	95.6	95.2	Ave.: 95.4	94.0	93.8	Ave.: 93.9	91.9	91.5	Ave.: 91.7		
Turbidity (NTU)	:	11.0	11.8	Ave.: 11.4	8.99	8.76	Ave.: 8.88	9.20	9.27	Ave.: 9.24	9.84	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: ____

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : ____

Field Operator	K.M.Kwan	Checked by		Laboratory Staff		Checked by	
Date	18-11-2013	Date	18/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 20-11-2013 Weather Condition : cloudy Ambient Temperature (°C) : 19 Sea Conditions: Calm / [✓ Small] Wave / Great Wave Tide Mode: Flood Tide Direction of water current: From CS6 to CS4

Station: CS6 (Upstream Control Station) Duration: 7:27 to 7:47 Depth of Water (meter): 12.6 Wet bulb calibration for DO meter: 9.00 mg/L (99.9 %) (19.9 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.3			11.6					
Temp. (°C)	:	23.2	23.3	Ave.: 23.3	23.2	23.2	Ave.: 23.2	23.1	23.2	Ave.: 23.2			
pH	:	7.30	7.30	Ave.: 7.30	7.37	7.37	Ave.: 7.37	7.41	7.42	Ave.: 7.42			
Salinity (ppt)	:	24.4	24.4	Ave.: 24.4	24.5	24.4	Ave.: 24.5	24.6	24.5	Ave.: 24.6			
D.O. (mg/L)	:	7.08	7.10	Ave.: 7.10	6.93	6.97	Ave.: 6.95	6.99	7.01	Ave.: 7.00			
D.O.S. (%)	:	94.8	95.0	Ave.: 94.9	92.8	93.3	Ave.: 93.1	93.6	93.9	Ave.: 93.8		120%	130%
Turbidity (NTU)	:	8.87	8.83	Ave.: 8.85	9.27	9.23	Ave.: 9.25	9.50	9.48	Ave.: 9.49	9.20	11.0	12.0
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10 (FCZ) Duration: 7:50 to 8:10 Depth of Water (meter): 13.4 Wet bulb calibration for DO meter: 8.98 mg/L (99.7 %) (20.0 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.7						12.4												
Temp. (°C)	:	23.2	23.2	Ave.: 23.2				23.2	23.2	23.2				23.1	23.1	Ave.: 23.1										
pH	:	7.27	7.28	Ave.: 7.28				7.33	7.33	7.33				7.39	7.39	Ave.: 7.39										
Salinity (ppt)	:	24.5	24.5	Ave.: 24.5				24.5	24.5	Ave.: 24.5				24.6	24.5	Ave.: 24.6										
D.O. (mg/L)	:	7.17	7.13	Ave.: 7.15	5.0	5.0	√	7.04	7.01	Ave.: 7.03	5.0	5.0	√	6.90	6.88	Ave.: 6.89	4.7	2.0	√							
D.O.S. (%)	:	96.0	95.5	Ave.: 95.8				94.3	93.9	Ave.: 9.41				92.4	92.1	Ave.: 92.3										
Turbidity (NTU)	:	8.99	9.02	Ave.: 9.01				9.17	9.13	Ave.: 9.15				9.30	9.27	Ave.: 9.29				9.15	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 Duration: 8:13 to 8:32 Depth of Water (meter): 5.4 Wet bulb calibration for DO meter: 8.97 mg/L (99.5 %) (20.0 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.4												
Temp. (°C)	:	23.3	23.2	Ave.: 23.3										23.0	23.1	Ave.: 23.1										
pH	:	7.34	7.35	Ave.: 7.35										7.44	7.43	Ave.: 7.44										
Salinity (ppt)	:	24.4	24.4	Ave.: 24.4						Ave.:				24.6	24.5	Ave.: 24.6										
D.O. (mg/L)	:	6.94	6.96	Ave.: 6.95	5.0	4.2	√			Ave.:	5.0	4.2		6.74	6.78	Ave.: 6.76	4.7	2.0	√							
D.O.S. (%)	:	92.9	93.2	Ave.:						Ave.:				90.2	90.8	Ave.: 90.5										
Turbidity (NTU)	:	10.7	10.8	Ave.: 10.8						Ave.:				11.0	11.1	Ave.: 11.1				11.0	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 Duration: 8:35 to 8:55 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 9.00 mg/L (99.8 %) (19.9 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	23.1	23.2	Ave.: 23.2										23.0	23.1	Ave.: 23.1										
pH	:	7.33	7.34	Ave.: 7.34										7.31	7.32	Ave.: 7.32										
Salinity (ppt)	:	24.3	24.4	Ave.: 24.4						Ave.:				24.5	24.6	Ave.: 24.6										
D.O. (mg/L)	:	6.87	6.90	Ave.: 6.89	5.0	4.2	✓			Ave.:	5.0	4.2		6.72	6.78	Ave.: 6.75	4.7	2.0	✓							
D.O.S. (%)	:	91.9	92.4	Ave.: 92.2						Ave.:				89.9	90.8	Ave.: 90.4										
Turbidity (NTU)	:	9.98	9.92	Ave.: 9.95						Ave.:				12.1	12.0	Ave.: 12.1				11.0	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 9:00 to 9:20 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 9.02 mg/L (100 %) (19.9 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.4						9.8												
Temp. (°C)	:	23.2	23.2	Ave.: 23.2				23.1	23.1	23.1				23.0	23.0	Ave.: 23.0										
pH	:	7.41	7.40	Ave.: 7.41				7.47	7.48	7.48				7.40	7.41	Ave.: 7.41										
Salinity (ppt)	:	24.3	24.3	Ave.: 24.3				24.4	24.5	Ave.: 24.5				24.5	24.5	Ave.: 24.5										
D.O. (mg/L)	:	7.01	7.00	Ave.: 7.01	5.0	4.2	✓	6.88	6.82	Ave.: 6.85	5.0	4.2	✓	6.84	6.86	Ave.: 6.85	4.7	2.0	✓							
D.O.S. (%)	:	93.9	93.7	Ave.: 93.8				92.1	91.3	Ave.: 91.7				91.6	91.8	Ave.: 91.7										
Turbidity (NTU)	:	9.47	9.41	Ave.: 9.44				9.82	9.88	Ave.: 9.85				10.2	10.3	Ave.: 10.3				9.86	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 9:23 to 9:43 Depth of Water (meter): 9.4 Wet bulb calibration for DO meter: 8.99 mg/L (99.8 %) (19.9 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.7						8.4												
Temp. (°C)	:	23.2	23.1	Ave.: 23.2				23.1	23.1	23.1				23.0	23.1	Ave.: 23.1										
pH	:	7.36	7.37	Ave.: 7.37				7.42	7.43	7.43				7.45	7.45	Ave.: 7.45										
Salinity (ppt)	:	24.4	24.4	Ave.: 24.4				24.4	24.4	Ave.: 24.4				24.5	24.5	Ave.: 24.5										
D.O. (mg/L)	:	6.95	6.91	Ave.: 6.93	5.0	4.2	✓	6.73	6.71	Ave.: 6.72	5.0	4.2	✓	6.80	6.88	Ave.: 6.84	4.7	2.0	✓							
D.O.S. (%)	:	93.1	92.5	Ave.: 9.28				90.1	89.8	Ave.: 90.0				91.0	92.1	Ave.: 91.6										
Turbidity (NTU)	:	10.4	10.5	Ave.: 10.5				10.7	10.8	Ave.: 10.8				11.4	11.6	Ave.: 11.5				10.9	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 9:46 to 10:06 Depth of Water (meter): 14.6 Wet bulb calibration for DO meter: 8.94 mg/L (99.4 %) (20.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.3						13.6												
Temp. (°C)	:	23.3	23.2	Ave.: 23.3				23.2	23.2	23.2				23.1	23.1	Ave.: 23.1										
pH	:	7.35	7.34	Ave.: 7.35				7.37	7.38	7.38				7.41	7.42	Ave.: 7.42										
Salinity (ppt)	:	24.5	24.6	Ave.: 24.6				24.6	24.6	Ave.: 24.6				24.6	24.6	Ave.: 24.6										
D.O. (mg/L)	:	7.20	7.18	Ave.: 7.19	5.0	4.2	√	7.01	7.02	Ave.: 7.02	5.0	4.2	√	6.94	6.90	Ave.: 6.92	4.7	2.0	√							
D.O.S. (%)	:	96.4	96.1	Ave.: 96.3				93.9	94.0	Ave.: 94.0				92.9	92.4	Ave.: 92.7										
Turbidity (NTU)	:	11.4	11.0	Ave.: 11.2				10.8	10.9	Ave.: 10.9				11.3	11.1	Ave.: 11.2				11.1	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 10:10 to 10:30 Depth of Water (meter): 16.0 Wet bulb calibration for DO meter: 8.98 mg/L (99.8 %) (20.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.0						15.0												
Temp. (°C)	:	23.2	23.2	Ave.: 23.2				23.1	23.1	23.1				23.1	23.0	Ave.: 23.1										
pH	:	7.40	7.40	Ave.: 7.40				7.56	7.57	7.57				7.47	7.46	Ave.: 7.47										
Salinity (ppt)	:	24.6	24.6	Ave.: 24.6				24.7	24.6	Ave.: 24.7				24.7	24.7	Ave.: 24.7										
D.O. (mg/L)	:	7.14	7.10	Ave.: 7.12	5.0	4.2	√	7.05	7.06	Ave.: 7.06	5.0	4.2	√	7.11	7.17	Ave.: 7.14	4.7	2.0	√							
D.O.S. (%)	:	95.6	95.1	Ave.: 95.4				94.4	94.5	Ave.: 94.5				95.2	96.0	Ave.: 9.56										
Turbidity (NTU)	:	10.4	10.3	Ave.: 10.4				9.94	9.96	Ave.: 9.95				9.90	9.98	Ave.: 9.94				10.1	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 10:33 to 10:57 Depth of Water (meter): 22.4 Wet bulb calibration for DO meter: 8.96 mg/L (99.6 %) (20.0 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.2			21.4				
Temp. (°C)	:	23.1	23.2	Ave.: 23.2	23.1	23.2	Ave.: 23.2	23.1	23.1	Ave.: 23.1		
pH	:	7.51	7.50	Ave.: 7.51	7.60	7.60	Ave.: 7.60	7.63	7.64	Ave.: 7.64		
Salinity (ppt)	:	24.5	24.6	Ave.: 24.6	24.7	24.6	Ave.: 24.7	24.7	24.7	Ave.: 24.7		
D.O. (mg/L)	:	7.06	7.04	Ave.: 7.05	6.74	6.76	Ave.: 6.75	6.57	6.60	Ave.: 6.59		
D.O.S. (%)	:	94.5	94.3	Ave.: 94.4	90.2	90.5	Ave.: 90.4	87.9	88.4	Ave.: 88.2		
Turbidity (NTU)	:	12.3	12.1	Ave.: 12.2	11.9	12.0	Ave.: 12.0	10.7	10.8	Ave.: 10.8	11.7	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? ~~Y~~/[✓ N] If yes, elaboration is as follows: ____________________

Any notable pollutant by others near monitoring site ? ~~Y~~/[✓ N] If yes, elaboration is as follows : ____________________

Field Operator	S.H. Lam	Checked by		Laboratory Staff		Checked by	
Date	20-11-2013	Date	20/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 20-11-2013 Weather Condition : cloudy Ambient Temperature (°C) : 20 Sea Conditions: Calm / [✓ Small Wave] / Great Wave Tide Mode: Ebb Tide Direction of water current: From CS4 to CS6

Station: CS6 Duration: 15:47 to 16:10 Depth of Water (meter): 12.0 Wet bulb calibration for DO meter: 9.01 mg/L (100 %) (20 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.0			11.0				
Temp. (°C)	:	23.3	23.2	Ave.: 23.3	23.2	23.2	Ave.: 23.2	23.1	23.1	Ave.: 23.1		
pH	:	7.28	7.29	Ave.: 7.29	7.31	7.31	Ave.: 7.31	7.47	7.48	Ave.: 7.48		
Salinity (ppt)	:	24.4	24.3	Ave.: 24.4	24.5	24.5	Ave.: 24.5	24.6	24.6	Ave.: 24.6		
D.O. (mg/L)	:	6.80	6.84	Ave.: 6.82	6.73	6.77	Ave.: 6.75	6.98	7.00	Ave.: 6.99		
D.O.S. (%)	:	91.1	91.6	Ave.: 91.4	90.1	90.6	Ave.: 90.4	93.5	93.7	Ave.: 93.6		
Turbidity (NTU)	:	8.74	8.78	Ave.: 8.76	9.01	9.09	Ave.: 9.05	9.57	9.60	Ave.: 9.59	9.13	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) Duration: 15:24 to 15:44 Depth of Water (meter): 13.0 Wet bulb calibration for DO meter: 9.00 mg/L (99.9 %) (20 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.5						12.0												
Temp. (°C)	:	23.2	23.2	Ave.: 23.2				23.2	23.1	23.2				23.0	23.1	Ave.: 23.1										
pH	:	7.20	7.21	Ave.: 7.21				7.30	7.30	7.30				7.35	7.36	Ave.: 7.36										
Salinity (ppt)	:	24.4	24.3	Ave.: 24.4				24.5	24.5	Ave.: 24.5				24.5	24.6	Ave.: 24.6										
D.O. (mg/L)	:	6.97	6.99	Ave.: 6.98	5.0	5.0	✓	7.07	7.01	Ave.: 7.04	5.0	5.0	✓	6.58	6.60	Ave.: 6.59	4.7	2.0	✓							
D.O.S. (%)	:	93.3	93.6	Ave.: 93.5				94.7	93.9	Ave.: 94.3				88.1	88.4	Ave.: 88.3										
Turbidity (NTU)	:	9.23	9.20	Ave.: 9.22				8.98	8.99	Ave.: 8.99				9.07	9.10	Ave.: 9.09				9.10	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 Duration: 15:00 to 15:20 Depth of Water (meter): 4.8 Wet bulb calibration for DO meter: 8.98 mg/L (99.6 %) (20 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.8												
Temp. (°C)	:	23.2	23.2	Ave.: 23.2										23.1	23.1	Ave.: 23.1										
pH	:	7.30	7.29	Ave.: 7.30										7.40	7.39	Ave.: 7.40										
Salinity (ppt)	:	24.4	24.4	Ave.: 24.4						Ave.:				24.5	24.6	Ave.: 24.6										
D.O. (mg/L)	:	7.02	7.08	Ave.: 7.04	5.0	4.2	✓			Ave.:	5.0	4.2		6.82	6.86	Ave.: 6.84	4.7	2.0	✓							
D.O.S. (%)	:	94.0	94.8	Ave.: 94.4						Ave.:				91.3	91.9	Ave.: 91.6										
Turbidity (NTU)	:	10.9	11.1	Ave.: 11.0						Ave.:				12.2	12.0	Ave.: 12.1				11.6	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – ***Northern***

Impact Water Quality Monitoring - Data Record Sheet ***(Ebb Condition)***

Station: SR9 Duration: 1436 to 14:56 Depth of Water (meter): 5.2 Wet bulb calibration for DO meter: 9.00 mg/L (99.9 %) (20 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.2												
Temp. (°C)	:	23.2	23.2	Ave.: 23.2										23.1	23.1	Ave.: 23.1										
pH	:	7.21	7.21	Ave.: 7.21										7.36	7.39	Ave.: 7.38										
Salinity (ppt)	:	24.3	24.4	Ave.: 24.4						Ave.:				24.7	24.6	Ave.: 24.7										
D.O. (mg/L)	:	7.00	7.08	Ave.: 7.04	5.0	4.2	√			Ave.:	5.0	4.2		6.83	6.85	Ave.: 6.84	4.7	2.0	√							
D.O.S. (%)	:	93.7	94.8	Ave.: 94.3						Ave.:				91.4	91.7	Ave.: 91.6										
Turbidity (NTU)	:	11.9	11.4	Ave.: 11.7						Ave.:				10.8	10.9	Ave.: 10.9				11.3	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 14:13 to 14:33 Depth of Water (meter): 10.2 Wet bulb calibration for DO meter: 8.99 mg/L (99.8 %) (20 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.1						9.2												
Temp. (°C)	:	23.3	23.3	Ave.: 23.3				23.2	23.3	23.3				23.2	23.1	Ave.: 23.2										
pH	:	7.30	7.28	Ave.: 7.29				7.25	7.26	7.26				7.34	7.33	Ave.: 7.34										
Salinity (ppt)	:	24.4	24.5	Ave.: 24.5				24.6	24.6	Ave.: 24.6				24.6	24.6	Ave.: 24.6										
D.O. (mg/L)	:	6.88	6.90	Ave.: 6.89	5.0	4.2	√	6.72	6.77	Ave.: 6.75	5.0	4.2	√	6.93	6.91	Ave.: 6.92	4.7	2.0	√							
D.O.S. (%)	:	92.1	92.4	Ave.: 92.3				89.9	90.6	Ave.: 90.3				92.8	92.5	Ave.: 92.7										
Turbidity (NTU)	:	12.1	12.2	Ave.: 12.2				10.4	10.5	Ave.: 10.5				10.9	10.6	Ave.: 10.8				11.2	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 13:50 to 14:10 Depth of Water (meter): 9.0 Wet bulb calibration for DO meter: 8.97 mg/L (99.7 %) (20 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.5						8.0												
Temp. (°C)	:	23.2	23.2	Ave.: 23.2				23.2	23.2	23.2				23.1	23.1	Ave.: 23.1										
pH	:	7.31	7.31	Ave.: 7.31				7.27	7.28	7.28				7.20	7.30	Ave.: 7.20										
Salinity (ppt)	:	24.4	24.4	Ave.: 24.4				24.5	24.6	Ave.: 24.6				24.6	24.6	Ave.: 24.6										
D.O. (mg/L)	:	6.94	6.96	Ave.: 6.95	5.0	4.2	√	6.91	6.93	Ave.: 6.92	5.0	4.2	√	7.02	7.01	Ave.: 7.02	4.7	2.0	√							
D.O.S. (%)	:	92.9	93.2	Ave.: 93.1				92.5	92.8	Ave.: 92.7				93.8	93.9	Ave.: 93.9										
Turbidity (NTU)	:	12.0	12.1	Ave.: 12.1				11.2	11.0	Ave.: 11.1				10.8	10.4	Ave.: 10.6				11.3	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: IS12 Duration: 13:26 to 13:46 Depth of Water (meter): 14.0 Wet bulb calibration for DO meter: 8.99 mg/L (99.7 %) (20.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.0						13.0												
Temp. (°C)	:	23.3	23.2	Ave.: 23.3				23.1	23.2	23.2				23.1	23.1	Ave.: 23.1										
pH	:	7.34	7.34	Ave.: 7.34				7.51	7.50	7.51				7.48	7.49	Ave.: 7.49										
Salinity (ppt)	:	24.4	24.4	Ave.: 24.4				24.5	24.4	Ave.: 24.5				24.6	24.6	Ave.: 24.6										
D.O. (mg/L)	:	7.08	7.10	Ave.: 7.09	5.0	4.2	✓	7.00	7.02	Ave.: 7.01	5.0	4.2	✓	6.82	6.88	Ave.: 6.85	4.7	2.0	✓							
D.O.S. (%)	:	94.8	95.1	Ave.: 95.0				93.7	94.0	Ave.: 93.9				91.3	92.1	Ave.: 91.7										
Turbidity (NTU)	:	10.8	11.0	Ave.: 10.9				11.5	11.4	Ave.: 11.5				11.3	11.1	Ave.: 11.2				11.2	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 13:03 to 13:23 Depth of Water (meter): 15.6 Wet bulb calibration for DO meter: 8.98 mg/L (99.6 %) (20.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.8						14.6												
Temp. (°C)	:	23.3	23.2	Ave.: 23.2				23.2	23.2	23.2				23.0	23.1	Ave.: 23.1										
pH	:	7.36	7.37	Ave.: 7.37				7.43	7.43	7.43				7.50	7.51	Ave.: 7.51										
Salinity (ppt)	:	24.5	24.5	Ave.: 24.5				24.5	24.5	Ave.: 24.5				24.6	24.6	Ave.: 24.6										
D.O. (mg/L)	:	7.01	7.02	Ave.: 7.02	5.0	4.2	✓	6.97	6.91	Ave.: 6.95	5.0	4.2	✓	6.94	6.97	Ave.: 6.96	4.7	2.0	✓							
D.O.S. (%)	:	93.9	94.0	Ave.: 94.0				93.3	92.5	Ave.: 92.9				92.9	93.3	Ave.: 93.1										
Turbidity (NTU)	:	9.48	9.50	Ave.: 9.49				12.6	12.5	Ave.: 12.6				12.1	12.2	Ave.: 12.2				11.4	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 12:40 to 13:00 Depth of Water (meter): 22.0 Wet bulb calibration for DO meter: 8.95 mg/L (99.4 %) (20.1 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.0			21.0					
Temp. (°C)	:	23.2	23.2	Ave.: 23.2	23.2	23.2	Ave.: 23.2	23.1	23.1	Ave.: 23.1			
pH	:	7.34	7.30	Ave.: 7.32	7.42	7.41	Ave.: 7.42	7.45	7.46	Ave.: 7.46			
Salinity (ppt)	:	24.4	24.5	Ave.: 24.5	24.6	24.5	Ave.: 24.6	24.7	24.6	Ave.: 24.7			
D.O. (mg/L)	:	7.18	7.15	Ave.: 7.17	6.83	6.87	Ave.: 6.85	7.08	7.10	Ave.: 7.09			
D.O.S. (%)	:	96.1	95.7	Ave.: 95.9	91.5	91.9	Ave.: 91.7	94.8	95.0	Ave.: 94.9		120%	130%
Turbidity (NTU)	:	9.91	9.93	Ave.: 9.92	11.8	11.9	Ave.: 11.9	11.7	11.6	Ave.: 11.7	11.2	13.4	14.6
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? Y/[✓ N] If yes, elaboration is as follows: ____________________

Any notable pollutant by others near monitoring site ? Y/[✓ N] If yes, elaboration is as follows : ____________________

Field Operator		Checked by		Laboratory Staff		Checked by	
Date	20-11-2013	Date	20/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 22/11/13 Weather Condition : Cloudy Ambient Temperature (°C) : 22°C Sea Conditions: Calm / [✓ Small Wave] / Great Wave Tide Mode: Flood Tide Direction of water current: From CS6 to CS4

Station: CS6 (Upstream Control Station) Duration: 8:46 to 9:02 Depth of Water (meter): 12.8 Wet bulb calibration for DO meter: 8.40 mg/L (99.6 %) (24.6 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.4			11.8					
Temp. (°C)	:	22.7	22.7	Ave.: 22.7	22.9	22.9	Ave.: 22.9	22.9	22.9	Ave.: 22.9			
pH	:	7.69	7.68	Ave.: 7.69	7.67	7.68	Ave.: 7.68	7.69	7.69	Ave.: 7.69			
Salinity (ppt)	:	24.0	24.0	Ave.: 24.0	24.6	24.6	Ave.: 24.6	24.8	24.8	Ave.: 24.8			
D.O. (mg/L)	:	6.02	6.05	Ave.: 6.04	5.95	5.91	Ave.: 5.93	5.96	5.98	Ave.: 5.97			
D.O.S. (%)	:	80.4	80.8	Ave.: 80.6	79.8	79.3	Ave.: 79.6	79.9	80.2	Ave.: 80.1		120%	130%
Turbidity (NTU)	:	7.23	7.28	Ave.: 7.26	7.75	7.71	Ave.: 7.73	8.26	8.22	Ave.: 8.24	7.74	8.93	10.06
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10(FCZ) Duration: 9:19 to 9:34 Depth of Water (meter): 14.0 Wet bulb calibration for DO meter: 8.41 mg/L (99.7 %) (24.6 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.0						13.0												
Temp. (°C)	:	22.6	22.6	Ave.: 22.6				22.8	22.8	22.8				22.9	22.9	Ave.: 22.9										
pH	:	7.68	7.67	Ave.: 7.68				7.69	7.70	7.70				7.70	7.71	Ave.: 7.71										
Salinity (ppt)	:	24.1	24.1	Ave.: 24.1				24.6	24.5	Ave.: 24.6				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.18	6.14	Ave.: 6.16	5.0	5.0	✓	5.98	5.94	Ave.: 5.96	5.0	5.0	✓	5.94	5.90	Ave.: 5.92	4.7	2.0	✓							
D.O.S. (%)	:	82.2	81.7	Ave.: 82.0				80.2	79.7	Ave.: 80.0				79.9	79.4	Ave.: 79.7										
Turbidity (NTU)	:	7.38	7.32	Ave.: 7.35				8.05	8.01	Ave.: 8.03				7.88	7.82	Ave.: 7.85				7.74	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 Duration: 9:52 to 10:03 Depth of Water (meter): 5.6 Wet bulb calibration for DO meter: 8.39 mg/L (99.6 %) (24.7 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	22.8	22.8	Ave.: 22.8										22.8	22.9	Ave.: 22.9										
pH	:	7.72	7.71	Ave.: 7.72										7.71	7.71	Ave.: 7.71										
Salinity (ppt)	:	24.8	24.8	Ave.: 24.8						Ave.:				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	5.92	5.95	Ave.: 5.94	5.0	4.2	✓			Ave.:	5.0	4.2		5.90	5.87	Ave.: 5.89	4.7	2.0	✓							
D.O.S. (%)	:	79.1	79.5	Ave.: 79.3						Ave.:				78.9	78.5	Ave.: 78.7										
Turbidity (NTU)	:	9.00	9.06	Ave.: 90.3						Ave.:				10.8	10.8	Ave.: 10.8				9.92	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 *Duration:* 10:08 *to* 10:20 *Depth of Water (meter):* 5.8 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.4 *%) (* 24.7 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	22.9	22.9	Ave.: 22.9										22.8	22.8	Ave.: 22.8										
pH	:	7.69	7.69	Ave.: 7.69										7.70	7.69	Ave.: 7.70										
Salinity (ppt)	:	24.7	24.6	Ave.: 24.7						Ave.:				24.8	24.7	Ave.: 24.8										
D.O. (mg/L)	:	6.06	6.03	Ave.: 6.05	5.0	4.2	✓			Ave.:	5.0	4.2		6.01	5.99	Ave.: 6.00	4.7	2.0	✓							
D.O.S. (%)	:	81.4	81.0	Ave.: 81.2						Ave.:				80.6	80.3	Ave.: 8.05										
Turbidity (NTU)	:	7.78	7.74	Ave.: 7.76						Ave.:				8.54	8.49	Ave.: 8.52				8.14	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 *Duration:* 10:25 *to* 10:40 *Depth of Water (meter):* 11.4 *Wet bulb calibration for DO meter:* 8.41 *mg/L (* 99.6 *%) (* 24.7 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.7						10.4												
Temp. (°C)	:	22.8	22.8	Ave.: 22.8				23.0	23.0	23.0				23.0	23.0	Ave.: 23.0										
pH	:	7.70	7.71	Ave.: 7.71				7.72	7.72	7.72				7.72	7.73	Ave.: 7.73										
Salinity (ppt)	:	24.1	24.1	Ave.: 24.1				24.9	24.9	Ave.: 24.9				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.02	6.05	Ave.: 6.04	5.0	4.2	✓	5.83	5.79	Ave.: 5.81	5.0	4.2	✓	5.89	5.86	Ave.: 5.88	4.7	2.0	✓							
D.O.S. (%)	:	80.8	81.2	Ave.: 81.0				78.5	78.0	Ave.: 78.3				79.3	78.9	Ave.: 79.1										
Turbidity (NTU)	:	6.51	6.47	Ave.: 6.49				7.54	7.50	Ave.: 7.52				~~8.80~~ 11.2	11.2	Ave.: 11.2				8.40	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 *Duration:* 10:46 *to* 11:02 *Depth of Water (meter):* 10.6 *Wet bulb calibration for DO meter:* 8.42 *mg/L (* 99.8 *%) (* 24.6 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.3						9.6												
Temp. (°C)	:	22.8	22.7	Ave.: 22.8				23.0	23.0	23.0				23.0	23.0	Ave.: 23.0										
pH	:	7.74	7.74	Ave.: 7.74				7.73	7.74	7.74				7.75	7.76	Ave.: 7.76										
Salinity (ppt)	:	24.1	24.1	Ave.: 24.1				24.9	24.9	Ave.: 24.9				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.06	6.03	Ave.: 6.05	5.0	4.2	✓	5.87	5.84	Ave.: 5.86	5.0	4.2	✓	5.94	5.90	Ave.: 5.92	4.7	2.0	✓							
D.O.S. (%)	:	81.0	80.6	Ave.: 80.8				79.0	78.6	Ave.: 78.8				79.9	79.4	Ave.: 79.7										
Turbidity (NTU)	:	7.19	7.12	Ave.: 7.16				8.29	8.26	Ave.: 8.28				8.32	8.27	Ave.: 8.30				7.91	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 11:10 to 11:25 Depth of Water (meter): 14.8 Wet bulb calibration for DO meter: 8.40 mg/L (99.5 %) (24.7 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.4						13.8												
Temp. (°C)	:	22.7	22.7	Ave.: 22.7				22.8	22.8	22.8				22.9	22.9	Ave.: 22.9										
pH	:	7.78	7.77	Ave.: 7.78				7.76	7.76	7.76				7.78	7.77	Ave.: 7.78										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.6	24.6	Ave.: 24.6				24.6	24.6	Ave.: 24.6										
D.O. (mg/L)	:	6.16	6.15	Ave.: 6.16	5.0	4.2	✓	6.01	5.97	Ave.: 5.99	5.0	4.2	✓	6.00	6.03	Ave.: 6.02	4.7	2.0	✓							
D.O.S. (%)	:	82.1	81.9	Ave.: 82.0				80.4	79.9	Ave.: 80.2				80.2	80.6	Ave.: 80.4										
Turbidity (NTU)	:	10.3	10.3	Ave.: 10.3				9.03	9.07	Ave.: 9.05				9.67	9.62	Ave.: 9.65				9.67	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 11:30 to 11:46 Depth of Water (meter): 17.2 Wet bulb calibration for DO meter: 8.39 mg/L (99.6 %) (24.6 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.6						16.2												
Temp. (°C)	:	22.7	22.7	Ave.: 22.7				22.8	22.8	22.8				22.8	22.8	Ave.: 22.8										
pH	:	7.79	7.78	Ave.: 7.79				7.78	7.78	7.78				7.76	7.77	Ave.: 7.77										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.4	24.4	Ave.: 24.4				24.6	24.6	Ave.: 24.6										
D.O. (mg/L)	:	6.13	6.15	Ave.: 6.14	5.0	4.2	✓	6.06	6.02	Ave.: 6.04	5.0	4.2	✓	5.97	5.93	Ave.: 5.95	4.7	2.0	✓							
D.O.S. (%)	:	81.7	82.0	Ave.: 81.9				81.1	80.6	Ave.: 80.9				80.0	79.5	Ave.: 79.8										
Turbidity (NTU)	:	8.62	8.57	Ave.: 8.60				6.55	6.51	Ave.: 6.53				10.2	10.2	Ave.: 10.2				8.44	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 12:00 to 12:16 Depth of Water (meter): 22.8 Wet bulb calibration for DO meter: 8.41 mg/L (99.5 %) (24.7 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.4			21.8				
Temp. (°C)	:	22.7	22.7	Ave.: 22.7	22.8	22.8	Ave.: 22.8	22.8	22.8	Ave.: 22.8		
pH	:	7.77	7.77	Ave.: 7.77	7.79	7.78	Ave.: 7.79	7.79	7.79	Ave.: 7.79		
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2	24.3	24.3	Ave.: 24.3	24.7	24.7	Ave.: 24.7		
D.O. (mg/L)	:	6.16	6.13	Ave.: 6.15	6.09	6.07	Ave.: 6.08	5.95	5.99	Ave.: 5.97		
D.O.S. (%)	:	82.4	82.1	Ave.: 82.3	81.3	80.9	Ave.: 81.1	79.7	80.3	Ave.: 80.0		
Turbidity (NTU)	:	8.51	8.49	Ave.: 8.50	~~10.5~~ 9.62	9.60	Ave.: 9.61	~~12.5~~ 11.3	11.3	Ave.: 11.3	9.80	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: ____________

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : ____________

Field Operator	Mak Tei Wai	Checked by		Laboratory Staff		Checked by	
Date	22/11/13	Date	22/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 22/11/13 *Weather Condition :* Cloudy *Ambient Temperature (°C) :* 22°C *Sea Conditions:* **Calm / [✓ Small Wave] / Great Wave** *Tide Mode:* **Ebb Tide** *Direction of water current:* **From CS4 to CS6**

Station: CS6 *Duration:* 16:28 *to* 16:45 *Depth of Water (meter):* 12.2 *Wet bulb calibration for DO meter:* 8.38 *mg/L (* 99.5 *%) (* 24.8 *°C)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.1			11.2				
Temp. (°C)	:	22.8	22.8	Ave.: 22.8	23.0	23.0	Ave.: 23.0	23.0	23.0	Ave.: 23.0		
pH	:	7.79	7.79	Ave.: 7.79	7.78	7.79	Ave.: 7.79	7.79	7.79	Ave.: 7.79		
Salinity (ppt)	:	24.1	24.1	Ave.: 24.1	24.7	24.7	Ave.: 24.7	24.8	24.8	Ave.: 24.8		
D.O. (mg/L)	:	6.10	6.13	Ave.: 6.12	6.04	6.07	Ave.: 6.06	5.98	5.95	Ave.: 5.97		
D.O.S. (%)	:	81.3	81.7	Ave.: 81.5	81.0	81.4	Ave.: 81.2	80.2	79.8	Ave.: 80.0		
Turbidity (NTU)	:	6.45	6.51	Ave.: 6.48	8.27	8.20	Ave.: 8.22	7.13	7.07	Ave.: 7.10	7.27	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10 (FCZ) *Duration:* 17:02 *to* 17:19 *Depth of Water (meter):* 13.4 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.6 *%) (* 24.8 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.7						12.4												
Temp. (°C)	:	22.8	22.8	Ave.: 22.8				23.0	23.0	23.0				23.0	23.0	Ave.: 23.0										
pH	:	7.78	7.79	Ave.: 7.76				7.79	7.78	7.79				7.78	7.77	Ave.: 7.78										
Salinity (ppt)	:	24.1	24.1	Ave.: 24.1				24.8	24.8	Ave.: 24.8				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.06	6.02	Ave.: 6.04	5.0	5.0	✓	5.91	5.95	Ave.: 5.93	5.0	5.0	✓	5.92	5.95	Ave.: 5.94	4.7	2.0	✓							
D.O.S. (%)	:	80.8	80.3	Ave.: 80.6				79.3	79.8	Ave.: 79.6				79.5	79.9	Ave.: 79.7										
Turbidity (NTU)	:	7.66	7.60	Ave.: 7.63				8.09	8.03	Ave.: 8.06				8.61	8.57	Ave.: 8.59				8.09	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 *Duration:* 16:07 *to* 16:18 *Depth of Water (meter):* 4.8 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.5 *%) (* 24.8 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.8												
Temp. (°C)	:	22.9	22.9	Ave.: 22.9										22.9	22.9	Ave.: 22.9										
pH	:	7.77	7.78	Ave.: 7.78										7.79	7.78	Ave.: 7.79										
Salinity (ppt)	:	24.8	24.8	Ave.: 24.8						Ave.:				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	5.97	5.99	Ave.: 5.98	5.0	4.2	✓			Ave.:	5.0	4.2		5.96	5.90	Ave.: 5.93	4.7	2.0	✓							
D.O.S. (%)	:	80.0	80.3	Ave.: 80.2						Ave.:				79.6	78.9	Ave.: 79.3										
Turbidity (NTU)	:	8.80	8.86	Ave.: 8.83						Ave.:				9.45	9.40	Ave.: 9.43				9.13	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: SR9 Duration: 15:48 to 16:00 Depth of Water (meter): 5.6 Wet bulb calibration for DO meter: 8.40 mg/L (99.7 %) (24.7 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	23.0	23.0	Ave.: 23.0										22.9	22.9	Ave.: 22.9										
pH	:	7.78	7.78	Ave.: 7.78										7.78	7.78	Ave.: 7.78										
Salinity (ppt)	:	24.8	24.8	Ave.: 24.8						Ave.:				24.8	24.8	Ave.: 24.8										
D.O. (mg/L)	:	6.02	6.05	Ave.: 6.04	5.0	4.2	✓			Ave.:	5.0	4.2		6.04	6.06	Ave.: 6.05	4.7	2.0	✓							
D.O.S. (%)	:	80.8	81.2	Ave.: 81.0						Ave.:				81.0	81.3	Ave.: 81.2										
Turbidity (NTU)	:	7.95	7.91	Ave.: 7.93						Ave.:				7.87	7.84	Ave.: 7.86				7.90	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 15:27 to 15:42 Depth of Water (meter): 10.4 Wet bulb calibration for DO meter: 8.42 mg/L (99.5 %) (24.8 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.2						9.4												
Temp. (°C)	:	23.0	23.0	Ave.: 23.0				23.1	23.1	23.1				23.1	23.1	Ave.: 23.1										
pH	:	7.77	7.76	Ave.: 7.77				7.77	7.78	7.78				7.78	7.78	Ave.: 7.78										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.8	24.8	Ave.: 24.8				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.05	6.08	Ave.: 6.07	5.0	4.2	✓	5.88	5.85	Ave.: 5.87	5.0	4.2	✓	5.90	5.94	Ave.: 5.92	4.7	2.0	✓							
D.O.S. (%)	:	80.7	81.1	Ave.: 80.9				79.1	78.8	Ave.: 79.0				79.4	79.9	Ave.: 79.7										
Turbidity (NTU)	:	6.90	6.94	Ave.: 6.92				8.80	8.86	Ave.: 8.83				10.2	10.2	Ave.: 10.2				8.65	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 15:03 to 15:21 Depth of Water (meter): 9.2 Wet bulb calibration for DO meter: 8.43 mg/L (99.6 %) (24.8 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.6						8.2												
Temp. (°C)	:	23.0	23.0	Ave.: 23.0				23.1	23.1	23.1				23.1	23.1	Ave.: 23.1										
pH	:	7.75	7.75	Ave.: 7.75				7.76	7.76	7.76				7.76	7.75	Ave.: 7.76										
Salinity (ppt)	:	24.1	24.1	Ave.: 24.1				24.8	24.8	Ave.: 24.8				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.10	6.13	Ave.: 6.12	5.0	4.2	✓	5.92	5.95	Ave.: 5.94	5.0	4.2	✓	5.93	5.89	Ave.: 5.91	4.7	2.0	✓							
D.O.S. (%)	:	81.5	81.9	Ave.: 81.7				79.6	80.0	Ave.: 79.8				79.8	79.3	Ave.: 79.6										
Turbidity (NTU)	:	7.24	7.20	Ave.: 7.22				8.22	8.17	Ave.: 8.20				11.4	11.4	Ave.: 11.4				8.94	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: IS12 Duration: 14:42 to 14:57 Depth of Water (meter): 14.2 Wet bulb calibration for DO meter: 8.43 mg/L (99.6 %) (24.8 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.1						13.2												
Temp. (°C)	:	23.0	23.0	Ave.: 23.0				23.1	23.1	23.1				23.1	23.1	Ave.: 23.1										
pH	:	7.72	7.71	Ave.: 7.72				7.70	7.70	7.70				7.69	7.70	Ave.: 7.70										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.5	24.5	Ave.: 24.5				24.6	24.5	Ave.: 24.6										
D.O. (mg/L)	:	6.19	6.16	Ave.: 6.18	5.0	4.2	✓	6.05	6.08	Ave.: 6.07	5.0	4.2	✓	5.90	5.86	Ave.: 5.88	4.7	2.0	✓							
D.O.S. (%)	:	82.9	82.4	Ave.: 82.7				81.0	81.4	Ave.: 81.2				75.6	75.0	Ave.: 75.3										
Turbidity (NTU)	:	7.88	7.82	Ave.: 7.85				9.94	9.90	Ave.: 9.92				10.3	10.3	Ave.: 10.3				9.36	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 14:21 to 14:36 Depth of Water (meter): 16.6 Wet bulb calibration for DO meter: 8.39 mg/L (99.4 %) (24.8 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.3						15.6												
Temp. (°C)	:	23.0	23.0	Ave.: 23.0				23.1	23.1	23.1				23.1	23.1	Ave.: 23.1										
pH	:	7.69	7.70	Ave.: 7.70				7.70	7.71	7.71				7.71	7.71	Ave.: 7.71										
Salinity (ppt)	:	24.3	24.3	Ave.: 24.3				24.6	24.6	Ave.: 24.6				24.7	24.7	Ave.: 24.7										
D.O. (mg/L)	:	6.11	6.08	Ave.: 6.10	5.0	4.2	✓	6.04	6.02	Ave.: 6.03	5.0	4.2	✓	5.95	5.91	Ave.: 5.93	4.7	2.0	✓							
D.O.S. (%)	:	81.3	80.9	Ave.: 81.1				80.7	80.4	Ave.: 80.6				80.1	79.6	Ave.: 79.9										
Turbidity (NTU)	:	7.22	7.17	Ave.: 7.20				8.95	8.91	Ave.: 8.93				12.3	12.3	Ave.: 12.3				9.48	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 13:49 to 14:07 Depth of Water (meter): 22.4 Wet bulb calibration for DO meter: 8.40 mg/L (99.5 %) (24.8 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.2			21.4					
Temp. (°C)	:	23.0	23.0	Ave.: 23.0	23.0	23.0	Ave.: 23.0	23.1	23.1	Ave.: 23.1			
pH	:	7.66	7.67	Ave.: 7.67	7.69	7.68	Ave.: 7.69	7.68	7.67	Ave.:			
Salinity (ppt)	:	24.3	24.3	Ave.: 24.3	24.5	24.5	Ave.: 24.5	24.7	24.7	Ave.: 24.7			
D.O. (mg/L)	:	6.14	6.17	Ave.: 6.16	6.10	6.07	Ave.: 6.09	5.98	5.94	Ave.: 5.96			
D.O.S. (%)	:	81.7	82.1	Ave.: 81.9	81.1	80.7	Ave.: 80.9	80.5	80.0	Ave.: 80.3		**120%**	**130%**
Turbidity (NTU)	:	8.59	8.55	Ave.: 8.57	10.5	10.5	Ave.: 10.5	12.5	12.5	Ave.: 12.5	10.5	12.6	13.7
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : __________

Field Operator	Mak Kei Wai	Checked by		Laboratory Staff		Checked by	
Date	22/11/13	Date	22/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 25.11.2013 *Weather Condition :* Fine *Ambient Temperature (°C) :* 22 *Sea Conditions:* *[✓ Calm] / Small Wave / Great Wave* *Tide Mode:* ***Flood Tide*** *Direction of water current:* ***From CS6 to CS4***

Station: *CS6 (Upstream Control Station)* *Duration:* 11:14 *to* 11:32 *Depth of Water (meter):* 13.2 *Wet bulb calibration for DO meter:* 8.40 *mg/L (* 99.6 *%) (* 24.6 *°C)*

		SURFACE			*MIDDLE*			*BOTTOM*			*DEPTH AVERAGE*	*REMARK*	
Depth (meter)	:	1.0			6.6			12.2					
Temp. (°C)	:	22.8	22.7	*Ave.:* 22.8	22.9	22.9	*Ave.:* 22.8	22.9	23.0	*Ave.:* 23.0			
pH	:	7.72	7.71	*Ave.:* 7.72	7.70	7.71	*Ave.:* 7.70	7.72	7.73	*Ave.:* 7.73			
Salinity (ppt)	:	23.9	24.0	*Ave.:* 24.0	24.6	24.5	*Ave.:* 24.6	24.8	24.9	*Ave.:* 24.9			
D.O. (mg/L)	:	6.11	6.14	*Ave.:* 6.13	6.04	6.01	*Ave.:* 6.03	6.05	6.07	*Ave.:* 6.0			
D.O.S. (%)	:	81.7	82.1	*Ave.:* 81.9	81.1	80.7	*Ave.:* 80.9	81.2	81.5	*Ave.:* 81.4		***120%***	***130%***
Turbidity (NTU)	:	2.76	2.65	*Ave.:* 2.71	2.54	2.51	*Ave.:* 2.53	2.45	2.47	*Ave.:* 2.46	2.56	3.08	3.33
S.S. (mg/L)	:			*Ave.:*			*Ave.:*			*Ave.:*			

Station: *SR10a (FCZ)* *Duration:* 11:38 *to* 11:56 *Depth of Water (meter):* 14.4 *Wet bulb calibration for DO meter:* 8.41 *mg/L (* 99.7 *%) (* 24.6 *°C)*

		SURFACE (S)			*Action*	*Limit*	*√/A/L*	*MIDDLE (M)*			*Action*	*Limit*	*√/A/L*	*BOTTOM (B)*			*Action*	*Limit*	*√/A/L*	*DEPTH AVE.*	*√/A/L*	*ACTION*		*LIMIT*		*REMARK*
Depth (meter)	:	1.0						7.2						13.4												
Temp. (°C)	:	22.7	22.6	*Ave.:* 22.7				22.8	22.9	22.9				23.0	22.9	*Ave.:* 23.0										
pH	:	7.71	7.70	*Ave.:* 7.71				7.72	7.73	7.73				7.73	7.74	*Ave.:* 7.74										
Salinity (ppt)	:	24.1	24.2	*Ave.:* 24.2				24.7	24.6	*Ave.:* 24.7				24.8	24.9	*Ave.:* 24.9										
D.O. (mg/L)	:	6.27	6.23	*Ave.:* 6.25	5.0	5.0	✓	6.07	6.03	*Ave.:* 6.05	5.0	5.0	✓	6.04	5.99	*Ave.:* 6.02	4.7	2.0	✓							
D.O.S. (%)	:	83.5	82.9	*Ave.:* 83.2				81.5	80.8	*Ave.:* 81.2				81.3	80.7	*Ave.:* 81.0										
Turbidity (NTU)	:	2.82	2.88	*Ave.:* 2.85				2.19	2.11	*Ave.:* 2.15				2.27	2.31	*Ave.:* 2.29				2.43	✓	*27.5 and 120% of CS6*	27.5	*47.0 and 130% of CS6*	47.0	
S.S. (mg/L)	:			*Ave.:*						*Ave.:*						*Ave.:*						*23.5 and 120% of CS6*		*34.4 and 130% of CS6*		

Station: *SR8* *Duration:* 12:02 *to* 12:20 *Depth of Water (meter):* 5.8 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.6 *%) (* 24.7 *°C)*

		SURFACE (S)			*Action*	*Limit*	*√/A/L*	*MIDDLE (M)*			*Action*	*Limit*	*√/A/L*	*BOTTOM (B)*			*Action*	*Limit*	*√/A/L*	*DEPTH AVE.*	*√/A/L*	*ACTION*		*LIMIT*		*REMARK*
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	22.8	22.9	*Ave.:* 22.9										22.9	22.9	*Ave.:* 22.9										
pH	:	7.75	7.74	*Ave.:* 7.75										7.74	7.74	*Ave.:* 7.74										
Salinity (ppt)	:	24.7	24.8	*Ave.:* 24.8						*Ave.:*				24.9	24.8	*Ave.:* 24.9										
D.O. (mg/L)	:	6.01	6.04	*Ave.:* 6.03	5.0	4.2	✓			*Ave.:*	5.0	4.2		5.99	5.96	*Ave.:* 5.98	4.7	2.0	✓							
D.O.S. (%)	:	80.4	80.8	*Ave.:* 80.6						*Ave.:*				80.1	79.7	*Ave.:* 79.9										
Turbidity (NTU)	:	3.18	3.21	*Ave.:* 3.20						*Ave.:*				3.24	3.30	*Ave.:* 3.27				3.23	✓	*27.5 and 120% of CS6*	27.5	*47.0 and 130% of CS6*	47.0	
S.S. (mg/L)	:			*Ave.:*						*Ave.:*						*Ave.:*						*23.5 and 120% of CS6*		*34.4 and 130% of CS6*		

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Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: SR9 *Duration:* 12:25 *to* 12:43 *Depth of Water (meter):* 5.6 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.4 *%) (* 24.7 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	22.8	22.9	Ave.: 22.9										22.9	23.0	Ave.: 23.0										
pH	:	7.72	7.71	Ave.: 7.72										7.73	7.72	Ave.: 7.73										
Salinity (ppt)	:	24.8	24.7	Ave.: 24.8						Ave.:				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.15	6.12	Ave.: 6.14	5.0	4.2	✓			Ave.:	5.0	4.2		6.10	6.08	Ave.: 6.09	4.7	2.0	✓							
D.O.S. (%)	:	82.7	82.3	Ave.: 82.5						Ave.:				81.9	81.6	Ave.: 81.8										
Turbidity (NTU)	:	2.50	2.54	Ave.: 2.52						Ave.:				3.46	3.52	Ave.: 3.49				3.01	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 *Duration:* 12:48 *to* 13:06 *Depth of Water (meter):* 11.8 *Wet bulb calibration for DO meter:* 8.41 *mg/L (* 99.6 *%) (* 24.7 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.9						10.8												
Temp. (°C)	:	22.9	22.8	Ave.: 22.9				22.9	23.0	23.0				23.1	23.1	Ave.: 23.1										
pH	:	7.73	7.74	Ave.: 7.74				7.75	7.74	7.75				7.75	7.76	Ave.: 7.76										
Salinity (ppt)	:	24.2	24.1	Ave.: 24.2				24.9	25.0	Ave.: 25.0				25.0	25.0	Ave.: 25.0										
D.O. (mg/L)	:	6.11	6.14	Ave.: 6.13	5.0	4.2	✓	5.92	5.88	Ave.: 5.90	5.0	4.2	✓	5.98	5.95	Ave.: 5.97	4.7	2.0	✓							
D.O.S. (%)	:	82.1	82.5	Ave.: 82.3				79.7	79.2	Ave.: 79.5				80.6	80.1	Ave.: 80.4										
Turbidity (NTU)	:	2.72	2.69	Ave.: 2.71				2.39	2.47	Ave.: 2.43				3.52	3.55	Ave.: 3.54				2.89	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 *Duration:* 13:12 *to* 13:30 *Depth of Water (meter):* 11.2 *Wet bulb calibration for DO meter:* 8.42 *mg/L (* 99.8 *%) (* 24.6 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.6						10.2												
Temp. (°C)	:	22.9	23.0	Ave.: 23.0				23.1	23.0	23.1				23.0	23.1	Ave.: 23.1										
pH	:	7.77	7.76	Ave.: 7.77				7.76	7.77	7.77				7.78	7.79	Ave.: 7.79										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				25.0	24.9	Ave.: 25.0				25.0	25.1	Ave.: 25.1										
D.O. (mg/L)	:	6.15	6.12	Ave.: 6.14	5.0	4.2	✓	5.96	5.93	Ave.: 5.95	5.0	4.2	✓	6.03	5.99	Ave.: 6.01	4.7	2.0	✓							
D.O.S. (%)	:	82.3	81.9	Ave.: 82.1				80.3	79.9	Ave.: 80.1				81.2	80.6	Ave.: 80.9										
Turbidity (NTU)	:	3.74	3.80	Ave.: 3.77				2.25	2.32	Ave.: 2.29				3.44	3.47	Ave.: 3.46				3.17	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

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Impact Water Quality Monitoring - Data Record Sheet **(Flood Conaition)**

Station: IS12 *Duration:* 13:36 *to* 13:54 *Depth of Water (meter):* 15.2 *Wet bulb calibration for DO meter:* 8.40 *mg/L (* 99.5 *%) (* 24.7 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.6						14.2												
Temp. (°C)	:	22.7	22.8	Ave.: 22.8				22.9	22.8	22.9				22.9	23.0	Ave.: 23.0										
pH	:	7.81	7.80	Ave.: 7.81				7.79	7.78	7.79				7.81	7.80	Ave.: 7.81										
Salinity (ppt)	:	24.2	24.3	Ave.: 24.3				24.6	24.5	Ave.: 24.6				24.6	24.7	Ave.: 24.7										
D.O. (mg/L)	:	6.25	6.24	Ave.: 6.25	5.0	4.2	√	6.10	6.06	Ave.: 6.08	5.0	4.2	√	6.09	6.12	Ave.: 6.11	4.7	2.0	√							
D.O.S. (%)	:	83.4	83.2	Ave.: 83.3				81.7	81.1	Ave.: 81.4				81.5	81.9	Ave.: 81.7										
Turbidity (NTU)	:	2.76	2.81	Ave.: 2.79				3.21	3.18	Ave.: 3.20				3.49	3.51	Ave.: 3.50				3.16	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 *Duration:* 14:01 *to* 14:20 *Depth of Water (meter):* 17.4 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.6 *%) (* 24.6 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.7						16.4												
Temp. (°C)	:	22.8	22.7	Ave.: 22.8				22.9	22.8	22.9				22.9	23.0	Ave.: 23.0										
pH	:	7.82	7.81	Ave.: 7.82				7.81	7.81	7.81				7.79	7.80	Ave.: 7.80										
Salinity (ppt)	:	24.3	24.3	Ave.: 24.3				24.4	24.5	Ave.: 24.5				24.6	24.5	Ave.: 24.6										
D.O. (mg/L)	:	6.22	6.24	Ave.: 6.23	5.0	4.2	√	6.15	6.11	Ave.: 6.13	5.0	4.2	√	6.06	6.02	Ave.: 6.04	4.7	2.0	√							
D.O.S. (%)	:	83.0	83.2	Ave.: 83.1				82.3	81.8	Ave.: 82.1				81.3	80.7	Ave.: 81.0										
Turbidity (NTU)	:	2.41	2.35	Ave.: 2.38				2.54	2.60	Ave.: 2.57				2.72	2.69	Ave.: 2.71				2.55	√	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 *Duration:* 14:26 *to* 14:44 *Depth of Water (meter):* 23.2 *Wet bulb calibration for DO meter:* 8.41 *mg/L (* 99.5 *%) (* 24.7 *°C)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.6			22.2				
Temp. (°C)	:	22.7	22.8	Ave.: 22.8	22.8	22.9	Ave.: 22.9	23.0	23.0	Ave.: 23.0		
pH	:	7.80	7.80	Ave.: 7.80	7.82	7.81	Ave.: 7.82	7.82	7.81	Ave.: 7.82		
Salinity (ppt)	:	24.2	24.3	Ave.: 24.3	24.3	24.4	Ave.: 24.4	24.6	24.5	Ave.: 24.6		
D.O. (mg/L)	:	6.25	6.22	Ave.: 6.24	6.18	6.16	Ave.: 6.17	6.04	6.08	Ave.: 6.06		
D.O.S. (%)	:	83.7	83.3	Ave.: 83.5	82.6	82.3	Ave.: 82.5	81.0	81.5	Ave.: 81.3		
Turbidity (NTU)	:	3.04	3.08	Ave.: 3.06	2.49	2.50	Ave.: 2.50	2.72	2.79	Ave.: 2.76	2.77	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? ~~Y~~/ N If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? ~~Y~~/ N If yes, elaboration is as follows : __________

Field Operator	Jacky Cheung	*Checked by*		*Laboratory Staff*		*Checked by*	
Date	25. 11. 2013	*Date*	25/11/13	*Date*		*Date*	

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Tuen Mun – Chek Lap Kok Link – ***Northern***

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 25-11-2013 *Weather Condition :* Fine *Ambient Temperature (°C) :* 22 *Sea Conditions:* ***Calm / [✓ Small Wave] / Great Wave*** *Tide Mode:* ***Ebb Tide*** *Direction of water current:* ***From CS4 to CS6***

Station: CS6 *Duration:* 19:41 *to* 19:51 *Depth of Water (meter):* 13.0 *Wet bulb calibration for DO meter:* 8.39 *mg/L (* 99.5 *%) (* 24.6 *°C)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.5			12.0				
Temp. (°C)	:	22.7	22.8	Ave.: 22.8	22.9	22.8	Ave.: 22.9	23.0	23.1	Ave.: 23.1		
pH	:	7.74	7.79	Ave.: 7.77	7.74	7.76	Ave.: 7.75	7.69	7.68	Ave.: 7.69		
Salinity (ppt)	:	23.9	23.9	Ave.: 23.9	24.6	24.5	Ave.: 24.0	24.8	24.9	Ave.: 24.9		
D.O. (mg/L)	:	6.02	6.04	Ave.: 6.03	5.94	5.96	Ave.: 5.95	6.00	5.98	Ave.: 5.99		
D.O.S. (%)	:	80.5	80.7	Ave.: 80.6	79.8	80.0	Ave.: 79.9	80.6	80.4	Ave.: 80.5		
Turbidity (NTU)	:	2.84	2.82	Ave.: 2.83	2.55	2.57	Ave.: 2.56	2.50	2.52	Ave.: 2.51	2.63	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10a (FCZ) *Duration:* 19:19 *to* 19:37 *Depth of Water (meter):* 14.1 *Wet bulb calibration for DO meter:* 8.42 *mg/L (* 99.8 *%) (* 24.6 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.1						13.1												
Temp. (°C)	:	22.8	22.8	Ave.: 22.8				22.9	23.0	23.0				23.1	23.0	Ave.: 23.1										
pH	:	7.64	7.66	Ave.: 7.65				7.69	7.71	7.70				7.76	7.78	Ave.: 7.77										
Salinity (ppt)	:	24.0	24.1	Ave.: 24.1				24.6	24.6	Ave.: 24.6				24.9	24.8	Ave.: 24.9										
D.O. (mg/L)	:	6.21	6.22	Ave.: 6.22	5.0	5.0	✓	6.01	5.99	Ave.: 6.00	5.0	5.0	✓	5.84	5.86	Ave.: 5.85	4.7	2.0	✓							
D.O.S. (%)	:	83.0	83.2	Ave.: 83.1				80.7	80.4	Ave.: 80.6				78.5	78.8	Ave.: 78.7										
Turbidity (NTU)	:	2.91	2.93	Ave.: 2.92				2.22	2.24	Ave.: 2.23				2.30	2.32	Ave.: 2.31				2.49	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 *Duration:* 18:56 *to* 19:14 *Depth of Water (meter):* 5.5 *Wet bulb calibration for DO meter:* 8.40 *mg/L (* 99.7 *%) (* 24.7 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.5												
Temp. (°C)	:	22.9	22.8	Ave.: 22.9										23.0	22.9	Ave.: 23.0										
pH	:	7.69	7.71	Ave.: 7.70										7.75	7.78	Ave.: 7.77										
Salinity (ppt)	:	24.8	24.7	Ave.: 24.8						Ave.:				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	5.92	5.94	Ave.: 5.93	5.0	4.2	✓			Ave.:	5.0	4.2		5.87	5.85	Ave.: 5.86	4.7	2.0	✓							
D.O.S. (%)	:	79.1	79.3	Ave.: 79.2						Ave.:				78.4	78.2	Ave.: 78.3										
Turbidity (NTU)	:	3.24	3.26	Ave.: 3.25						Ave.:				3.32	3.34	Ave.: 3.33				3.29	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: SR9 Duration: 18:33 to 18:51 Depth of Water (meter): 5.4 Wet bulb calibration for DO meter: 8.40 mg/L (99.5 %) (24.7 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.4												
Temp. (°C)	:	22.8	22.8	Ave.: 22.8										22.9	228	Ave.: 22.9										
pH	:	7.69	7.67	Ave.: 7.68										7.74	7.76	Ave.: 7.75										
Salinity (ppt)	:	24.7	24.8	Ave.: 24.8						Ave.:				24.9	24.8	Ave.: 24.9										
D.O. (mg/L)	:	6.04	6.02	Ave.: 6.03	5.0	4.2	✓			Ave.:	5.0	4.2		5.94	5.92	Ave.: 5.93	4.7	2.0	✓							
D.O.S. (%)	:	81.1	80.8	Ave.: 81.0						Ave.:				79.8	79.5	Ave.: 79.7										
Turbidity (NTU)	:	2.56	2.58	Ave.: 2.57						Ave.:				3.54	3.56	Ave.: 3.55				3.06	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 18:10 to 18:28 Depth of Water (meter): 11.6 Wet bulb calibration for DO meter: 8.42 mg/L (99.6 %) (24.7 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.8						10.6												
Temp. (°C)	:	22.8	22.9	Ave.: 22.9				23.0	22.9	23.0				23.1	23.0	Ave.: 23.1										
pH	:	7.71	7.73	Ave.: 7.72				7.78	7.80	7.79				7.76	7.74	Ave.: 7.75										
Salinity (ppt)	:	24.2	24.1	Ave.: 24.2				24.9	24.9	Ave.: 24.9				25.0	24.9	Ave.: 25.0										
D.O. (mg/L)	:	6.06	6.08	Ave.: 6.07	5.0	4.2	✓	5.84	5.86	Ave.: 5.85	5.0	4.2	✓	5.91	5.93	Ave.: 5.42	4.7	2.0	✓							
D.O.S. (%)	:	81.4	81.7	Ave.: 81.6				78.7	78.9	Ave.: 78.8				79.7	79.9	Ave.: 79.8										
Turbidity (NTU)	:	2.75	2.77	Ave.: 2.76				2.64	2.66	Ave.: 2.65				3.57	3.58	Ave.: 3.58				3.00	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 17:47 to 18:05 Depth of Water (meter): 11.0 Wet bulb calibration for DO meter: 8.44 mg/L (99.4 %) (24.6 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.5						10.0												
Temp. (°C)	:	22.9	22.9	Ave.: 22.9				23.0	22.9	23.0				23.1	23.0	Ave.: 23.1										
pH	:	7.75	7.77	Ave.: 7.76				7.74	7.72	7.73				7.81	7.83	Ave.: 7.82										
Salinity (ppt)	:	24.1	24.1	Ave.: 24.1				24.8	24.9	Ave.: 24.9				25.1	25.0	Ave.: 25.0										
D.O. (mg/L)	:	6.11	6.09	Ave.: 6.10	5.0	4.2	✓	5.87	5.89	Ave.: 5.88	5.0	4.2	✓	5.92	5.90	Ave.: 5.91	4.7	2.0	✓							
D.O.S. (%)	:	82.1	81.8	Ave.: 82.0				79.1	79.3	Ave.: 79.2				79.8	79.5	Ave.: 79.7										
Turbidity (NTU)	:	3.82	3.81	Ave.: 3.82				2.35	2.37	Ave.: 2.36				3.52	3.54	Ave.: 3.53				3.24	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Station: IS12 Duration: 17:24 to 17:42 Depth of Water (meter): 15.0 Wet bulb calibration for DO meter: 8.42 mg/L (99.6 %) (24.7 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.5						14.0												
Temp. (°C)	:	22.7	22.8	Ave.: 22.8				22.9	22.8	22.9				23.0	22.9	Ave.: 23.0										
pH	:	7.74	7.76	Ave.: 7.75				7.82	7.84	7.83				7.86	7.88	Ave.: 7.87										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.5	24.4	Ave.: 24.5				24.6	24.7	Ave.: 24.7										
D.O. (mg/L)	:	6.17	6.19	Ave.: 6.18	5.0	4.2	✓	6.04	6.06	Ave.: 6.05	5.0	4.2	✓	6.00	6.02	Ave.: 6.01	4.7	2.0	✓							
D.O.S. (%)	:	82.3	82.6	Ave.: 82.5				80.8	81.0	Ave.: 80.9				80.5	80.7	Ave.: 80.6										
Turbidity (NTU)	:	2.79	2.81	Ave.: 2.80				3.24	3.26	Ave.: 3.25				3.56	3.58	Ave.: 3.57				3.21	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 17:01 to 17:19 Depth of Water (meter): 17.1 Wet bulb calibration for DO meter: 9.40 mg/L (99.7 %) (24.6 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.6						16.1												
Temp. (°C)	:	22.7	22.7	Ave.: 22.7				22.8	22.9	22.9				23.0	23.1	Ave.: 23.1										
pH	:	7.77	7.79	Ave.: 7.78				7.82	7.80	7.81				7.83	7.85	Ave.: 7.84										
Salinity (ppt)	:	24.3	24.2	Ave.: 24.3				24.4	24.5	Ave.: 24.5				24.6	24.6	Ave.: 24.6										
D.O. (mg/L)	:	6.15	6.17	Ave.: 6.16	5.0	4.2	✓	6.07	6.09	Ave.: 6.08	5.0	4.2	✓	5.99	6.01	Ave.: 6.00	4.7	2.0	✓							
D.O.S. (%)	:	82.0	82.2	Ave.: 82.1				81.2	81.5	Ave.: 81.4				80.3	80.6	Ave.: 80.5										
Turbidity (NTU)	:	2.44	2.46	Ave.: 2.45				2.62	2.64	Ave.: 2.63				2.82	2.80	Ave.: 2.81				2.63	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 16:38 to 16:56 Depth of Water (meter): 23.0 Wet bulb calibration for DO meter: 8.43 mg/L (99.6 %) (24.7 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.5			22.0					
Temp. (°C)	:	22.8	22.7	Ave.: 22.8	22.9	22.9	Ave.: 22.9	23.0	22.9	Ave.: 23.0			
pH	:	7.78	7.80	Ave.: 7.79	7.76	7.74	Ave.: 7.75	7.82	7.84	Ave.: 7.83			
Salinity (ppt)	:	24.3	24.3	Ave.: 24.3	24.5	24.4	Ave.: 24.5	24.7	24.6	Ave.: 24.7			
D.O. (mg/L)	:	6.19	6.20	Ave.: 6.20	6.14	6.12	Ave.: 6.13	5.97	5.95	Ave.: 5.96			
D.O.S. (%)	:	82.6	82.7	Ave.: 82.7	82.2	81.9	Ave.: 82.1	80.1	79.8	Ave.: 80.0		120%	130%
Turbidity (NTU)	:	3.11	3.13	Ave.: 3.12	2.52	2.54	Ave.: 2.53	2.80	2.81	Ave.: 2.81	2.82	3.38	3.66
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? ~~Y~~/N If yes, elaboration is as follows: ______

Any notable pollutant by others near monitoring site ? ~~Y~~/N If yes, elaboration is as follows : ______

Field Operator	Tong Chang Hong	Checked by		Laboratory Staff		Checked by	
Date	25-11-2013	Date	25/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 27-11-2013 *Weather Condition :* cloudy *Ambient Temperature (°C) :* 22°c *Sea Conditions: Calm / [✓ Small Wave] / Great Wave* *Tide Mode: Flood Tide* *Direction of water current: From CS6 to CS4*

Station: CS6 (Upstream Control Station) *Duration:* 13:20 *to* 13:37 *Depth of Water (meter):* 13.4 *Wet bulb calibration for DO meter:* 8.45 *mg/L (* 99.7 *%) (* 24.2 *°C)*

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			6.7			12.4					
Temp. (°C)	:	22.8	22.8	Ave.: 22.8	22.9	22.9	Ave.: 22.9	22.9	22.9	Ave.: 22.9			
pH	:	7.64	7.67	Ave.: 7.66	7.70	7.68	Ave.: 7.69	7.69	7.70	Ave.: 7.70			
Salinity (ppt)	:	24.0	24.0	Ave.: 24.0	24.5	24.6	Ave.: 24.6	24.9	24.9	Ave.: 24.9			
D.O. (mg/L)	:	6.23	6.27	Ave.: 6.25	6.08	6.11	Ave.: 6.10	6.01	5.98	Ave.: 6.00			
D.O.S. (%)	:	83.4	84.0	Ave.: 83.7	81.4	81.9	Ave.: 81.7	80.5	80.1	Ave.: 80.3		120%	130%
Turbidity (NTU)	:	2.98	2.97	Ave.: 2.98	3.75	3.45	Ave.: 3.60	3.13	3.07	Ave.: 3.10	3.23	3.88	4.20
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10a (FCZ) *Duration:* 12:53 *to* 13:10 *Depth of Water (meter):* 14.4 *Wet bulb calibration for DO meter:* 8.48 *mg/L (* 99.5 *%) (* 24.3 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.2						13.4												
Temp. (°C)	:	22.7	22.6	Ave.: 22.7				22.7	22.7	22.7				22.8	22.8	Ave.: 22.8										
pH	:	7.62	7.61	Ave.: 7.62				7.66	7.67	7.67				7.64	7.65	Ave.: 7.65										
Salinity (ppt)	:	24.2	24.3	Ave.: 24.3				24.6	24.6	Ave.: 24.6				24.9	24.8	Ave.: 24.9										
D.O. (mg/L)	:	6.33	6.30	Ave.: 6.32	5.0	5.0	✓	6.16	6.14	Ave.: 6.15	5.0	5.0	✓	5.92	5.94	Ave.: 5.93	4.7	2.0	✓							
D.O.S. (%)	:	84.8	84.4	Ave.: 84.6				81.5	82.2	Ave.: 81.4				79.3	79.6	Ave.: 79.5										
Turbidity (NTU)	:	3.44	3.62	Ave.: 3.53				3.76	4.11	Ave.: 3.94				3.28	3.67	Ave.: 3.48				3.65	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 *Duration:* 13:45 *to* 14:00 *Depth of Water (meter):* 5.7 *Wet bulb calibration for DO meter:* 8.45 *mg/L (* 99.8 *%) (* 24.8 *°C)*

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.7												
Temp. (°C)	:	22.8	22.7	Ave.: 22.8										22.8	22.8	Ave.: 22.8										
pH	:	7.70	7.71	Ave.: 7.71										7.72	7.73	Ave.: 7.73										
Salinity (ppt)	:	24.7	24.7	Ave.: 24.7						Ave.:				24.7	24.8	Ave.: 24.8										
D.O. (mg/L)	:	6.14	6.17	Ave.: 6.16	5.0	4.2	✓			Ave.:	5.0	4.2		5.97	6.02	Ave.: 6.00	4.7	2.0	✓							
D.O.S. (%)	:	82.3	82.7	Ave.: 82.5						Ave.:				80.0	80.6	Ave.: 80.3										
Turbidity (NTU)	:	3.78	3.34	Ave.: 3.56						Ave.:				4.25	4.79	Ave.: 4.52				4.04	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Station: SR9 Duration: 14207 to 14223 Depth of Water (meter): 5.6 Wet bulb calibration for DO meter: 8.42 mg/L (99.7 %) (24.2 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	22.9	22.9	Ave.: 22.9										22.8	22.9	Ave.: 22.9										
pH	:	7.70	7.72	Ave.: 7.71										7.73	7.74	Ave.: 7.74										
Salinity (ppt)	:	24.8	24.9	Ave.: 24.9						Ave.:				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.21	6.19	Ave.: 6.20	5.0	4.2	✓			Ave.:	5.0	4.2		5.88	5.92	Ave.: 5.90	4.7	2.0	✓							
D.O.S. (%)	:	83.2	82.9	Ave.: 83.1						Ave.:				78.8	79.3	Ave.: 79.1										
Turbidity (NTU)	:	4.11	3.95	Ave.: 4.03						Ave.:				3.99	3.81	Ave.: 3.90				3.97	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 14228 to 14245 Depth of Water (meter): 11.6 Wet bulb calibration for DO meter: 8.44 mg/L (99.7 %) (24.2 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.8						10.6												
Temp. (°C)	:	22.8	22.9	Ave.: 22.9				22.8	22.8	22.8				22.9	23.0	Ave.: 23.0										
pH	:	7.74	7.75	Ave.: 7.75				7.72	7.71	7.72				7.76	7.77	Ave.: 7.77										
Salinity (ppt)	:	24.3	24.4	Ave.: 24.4				24.7	24.8	Ave.: 24.8				25.0	24.9	Ave.: 25.0										
D.O. (mg/L)	:	6.13	6.10	Ave.: 6.12	5.0	4.2	✓	5.93	5.89	Ave.: 5.91	5.0	4.2	✓	5.82	5.80	Ave.: 5.81	4.7	2.0	✓							
D.O.S. (%)	:	82.1	81.7	Ave.: 81.9				79.4	78.9	Ave.: 79.2				78.0	77.7	Ave.: 77.9										
Turbidity (NTU)	:	4.49	4.36	Ave.: 4.43				4.19	4.12	Ave.: 4.16				5.27	4.79	Ave.: 5.03				4.54	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 14250 to 15208 Depth of Water (meter): 11.4 Wet bulb calibration for DO meter: 8.45 mg/L (99.5 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.7						10.4												
Temp. (°C)	:	22.9	22.9	Ave.: 22.9				22.9	23.0	23.0				22.9	23.0	Ave.: 23.0										
pH	:	7.70	7.72	Ave.: 7.71				7.74	7.73	7.74				7.74	7.75	Ave.: 7.75										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.8	24.9	Ave.: 24.9				25.0	25.0	Ave.: 25.0										
D.O. (mg/L)	:	6.07	6.09	Ave.: 6.08	5.0	4.2	✓	5.82	5.85	Ave.: 5.84	5.0	4.2	✓	5.76	5.78	Ave.: 5.77	4.7	2.0	✓							
D.O.S. (%)	:	81.3	81.6	Ave.: 81.5				80.0	78.4	Ave.: 79.2				77.2	77.7	Ave.: 77.5										
Turbidity (NTU)	:	5.14	5.21	Ave.: 5.18				4.72	5.05	Ave.: 4.89				4.38	4.49	Ave.: 4.44				4.84	✓	27.5 and 120% of CS6		47.0 and 130% of CS6		
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condi..on)**

Station: IS12 Duration: 15:13 to 15:32 Depth of Water (meter): 15.4 Wet bulb calibration for DO meter: 8.44 mg/L (99.6 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.7						14.4												
Temp. (°C)	:	22.8	22.9	Ave.: 22.9				22.8	22.7	22.8				22.8	22.7	Ave.: 22.8										
pH	:	7.64	7.67	Ave.: 7.66				7.69	7.67	7.68				7.70	7.72	Ave.: 7.71										
Salinity (ppt)	:	24.3	24.4	Ave.: 24.4				24.6	24.6	Ave.: 24.6				24.7	24.8	Ave.: 24.8										
D.O. (mg/L)	:	6.29	6.27	Ave.: 6.28	5.0	4.2	✓	6.18	6.15	Ave.: 6.17	5.0	4.2	✓	6.04	6.05	Ave.: 6.05	4.7	2.0	✓							
D.O.S. (%)	:	84.3	84.0	Ave.: 84.2				82.8	82.4	Ave.: 82.6				81.1	81.3	Ave.: 81.2										
Turbidity (NTU)	:	4.74	4.58	Ave.: 4.66				4.87	4.68	Ave.: 4.78				5.09	5.00	Ave.: 5.05				4.83	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 15:37 to 15:56 Depth of Water (meter): 17.2 Wet bulb calibration for DO meter: 8.41 mg/L (99.7 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.6						16.2												
Temp. (°C)	:	22.9	22.9	Ave.: 22.9				22.8	22.8	22.8				22.8	22.8	Ave.: 22.8										
pH	:	7.69	7.67	Ave.: 7.68				7.72	7.73	7.73				7.75	7.76	Ave.: 7.76										
Salinity (ppt)	:	24.4	24.4	Ave.: 24.4				24.5	24.6	Ave.: 24.6				24.7	24.7	Ave.: 24.7										
D.O. (mg/L)	:	6.24	6.21	Ave.: 6.23	5.0	4.2	✓	6.13	6.11	Ave.: 6.12	5.0	4.2	✓	5.96	5.99	Ave.: 5.98	4.7	2.0	✓							
D.O.S. (%)	:	83.6	83.2	Ave.: 83.4				82.1	81.9	Ave.: 82.0				79.8	80.3	Ave.: 80.1										
Turbidity (NTU)	:	5.03	4.87	Ave.: 4.95				4.20	4.57	Ave.: 4.39				4.33	4.11	Ave.: 4.22				4.52	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 16:03 to 16:20 Depth of Water (meter): 23.4 Wet bulb calibration for DO meter: 8.43 mg/L (99.8 %) (24.1 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.7			22.4				
Temp. (°C)	:	22.9	22.8	Ave.: 22.9	22.8	22.8	Ave.: 22.8	22.9	22.9	Ave.: 22.9		
pH	:	7.72	7.73	Ave.: 7.73	7.78	7.80	Ave.: 7.79	7.79	7.80	Ave.: 7.80		
Salinity (ppt)	:	24.3	24.4	Ave.: 24.4	24.5	24.5	Ave.: 24.5	24.7	24.7	Ave.: 24.7		
D.O. (mg/L)	:	6.29	6.27	Ave.: 6.28	6.16	6.18	Ave.: 6.17	6.02	6.04	Ave.: 6.03		
D.O.S. (%)	:	84.3	84.0	Ave.: 84.2	82.5	82.8	Ave.: 82.7	80.7	80.9	Ave.: 80.8		
Turbidity (NTU)	:	3.74	3.49	Ave.: 3.62	3.58	4.01	Ave.: 3.80	3.75	3.56	Ave.: 3.66	3.69	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Any notable discoloration of water ? Y / [✓ N] If yes, elaboration is as follows: ______

Any notable pollutant by others near monitoring site ? Y / [✓ N] If yes, elaboration is as follows : ______

Field Operator	K.M. Kwan	Checked by		Laboratory Staff		Checked by	
Date	27-11-2013	Date		Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Conditic. ,**

Sampling Date : 27-11-2013 Weather Condition : Cloudy Ambient Temperature (°C) : 17 Sea Conditions: Calm / [✓ Small Wave] / Great Wave Tide Mode: Ebb Tide Direction of water current: From CS4 to CS6

Station: CS6 Duration: 22:30 to 22:49 Depth of Water (meter): 12.4 Wet bulb calibration for DO meter: 8.44 mg/L (99.6 %) (24.0 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.2			11.4				
Temp. (°C)	:	22.8	22.7	Ave.: 22.8	22.9	22.8	Ave.: 22.9	22.9	22.8	Ave.: 22.9		
pH	:	7.70	7.68	Ave.: 7.69	7.72	7.71	Ave.: 7.72	7.70	7.68	Ave.: 7.69		
Salinity (ppt)	:	24.0	24.0	Ave.: 24.0	24.5	24.4	Ave.: 24.5	24.8	24.8	Ave.: 24.8		
D.O. (mg/L)	:	6.31	6.33	Ave.: 6.32	6.17	6.13	Ave.: 6.15	5.94	5.96	Ave.: 5.95		
D.O.S. (%)	:	84.5	84.8	Ave.: 84.7	82.6	82.1	Ave.: 82.4	79.6	79.8	Ave.: 79.7		
Turbidity (NTU)	:	3.04	3.06	Ave.: 3.05	3.54	3.69	Ave.: 3.62	3.19	3.24	Ave.: 3.22	3.30	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10a (FCZ) Duration: 21:58 to 22:16 Depth of Water (meter): 13.6 Wet bulb calibration for DO meter: 8.49 mg/L (99.8 %) (23.9 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						6.8						12.6												
Temp. (°C)	:	22.6	22.7	Ave.: 22.7				22.7.	22.7	22.7				22.8	22.8	Ave.: 22.8										
pH	:	7.68	7.69	Ave.: 7.69				7.59	7.60	7.60				7.62	7.63	Ave.: 7.63										
Salinity (ppt)	:	24.1	24.1	Ave.: 24.1				24.5	24.6	Ave.: 24.6				24.8	24.8	Ave.: 24.8										
D.O. (mg/L)	:	6.24	6.26	Ave.: 6.25	5.0	5.0	√	6.08	6.01	Ave.: 6.05	5.0	5.0	√	5.88	5.82	Ave.: 5.85	4.7	2.0	√							
D.O.S. (%)	:	83.6	83.8	Ave.: 83.7				81.4	80.5	Ave.: 81.0				78.1	77.9	Ave.: 7.83										
Turbidity (NTU)	:	3.76	3.80	Ave.: 3.78				3.89	3.96	Ave.: 3.93				3.57	3.63	Ave.: 3.60				3.77	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 Duration: 21:28 to 21:43 Depth of Water (meter): 4.4 Wet bulb calibration for DO meter: 8.41 mg/L (99.4 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												3.4												
Temp. (°C)	:	22.7	22.7	Ave.: 22.7										22.7	22.8	Ave.: 22.8										
pH	:	7.78	7.79	Ave.: 7.79										7.74	7.70	Ave.: 7.72										
Salinity (ppt)	:	24.5	24.4	Ave.: 24.5						Ave.:				24.8	24.7	Ave.: 24.8										
D.O. (mg/L)	:	6.20	6.22	Ave.: 6.21	5.0	4.2	√			Ave.:	5.0	4.2		6.01	6.00	Ave.: 6.01	4.7	2.0	√							
D.O.S. (%)	:	83.0	83.3	Ave.: 83.2						Ave.:				80.5	80.4	Ave.: 80.5										
Turbidity (NTU)	:	3.59	3.62	Ave.: 3.61						Ave.:				4.61	4.78	Ave.: 4.70				4.16	√	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR9 Duration: 21:06 to 21:21 Depth of Water (meter): 5.6 Wet bulb calibration for DO meter: 8.42 mg/L (99.6 %) (23.9 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.6												
Temp. (°C)	:	22.8	22.7	Ave.: 228										22.8	22.9	Ave.: 22.9										
pH	:	7.68	7.69	Ave.: 7.69										7.70	7.71	Ave.: 7.71										
Salinity (ppt)	:	24.8	24.8	Ave.: 24.8						Ave.:				24.9	24.8	Ave.: 24.9										
D.O. (mg/L)	:	6.01	6.09	Ave.: 6.05	5.0	4.2	✓			Ave.:	5.0	4.2		5.93	5.97	Ave.: 595	4.7	2.0	✓							
D.O.S. (%)	:	80.5	81.6	Ave.: 81.1						Ave.:				79.4	79.9	Ave.: 79.7										
Turbidity (NTU)	:	4.17	4.27	Ave.: 4.22						Ave.:				4.09	4.20	Ave.: 4.15				4.19	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 20:44 to 21:00 Depth of Water (meter): 10.8 Wet bulb calibration for DO meter: 8.46 mg/L (99.8 %) (24.0 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.4						9.8												
Temp. (°C)	:	22.7	22.6	Ave.: 22.7				22.7	22.8	22.8				22.8	22.8	Ave.: 22.8										
pH	:	7.70	7.70	Ave.: 7.70				7.76	7.75	7.76				7.80	7.81	Ave.: 7.81										
Salinity (ppt)	:	24.3	24.4	Ave.: 24.4				24.6	24.5	Ave.: 24.6				24.9	24.8	Ave.: 24.9										
D.O. (mg/L)	:	6.07	6.03	Ave.: 6.05	5.0	4.2	✓	6.02	6.07	Ave.: 6.05	5.0	4.2	✓	5.83	5.80	Ave.: 5.82	4.7	2.0	✓							
D.O.S. (%)	:	81.3	80.8	Ave.: 81.1				80.6	81.3	Ave.: 81.0				78.1	77.7	Ave.: 77.9										
Turbidity (NTU)	:	4.53	4.65	Ave.: 4.59				4.37	4.42	Ave.: 4.40				5.11	5.20	Ave.: 5.16				4.72	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 20:24 to 20:39 Depth of Water (meter): 9.8 Wet bulb calibration for DO meter: 8.41 mg/L (99.4 %) (23.9 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						4.9						8.8												
Temp. (°C)	:	22.7	22.7	Ave.: 22.7				22.9	22.8	22.9				22.9	22.8	Ave.: 22.9										
pH	:	7.76	7.74	Ave.: 7.75				7.79	7.78	7.79				7.70	7.69	Ave.: 7.70										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.8	24.7	Ave.: 24.8				24.9	24.8	Ave.: 24.9										
D.O. (mg/L)	:	6.02	6.09	Ave.: 6.06	5.0	4.2	✓	5.93	5.90	Ave.: 5.92	5.0	4.2	✓	5.88	5.89	Ave.: 5.89	4.7	2.0	✓							
D.O.S. (%)	:	80.6	81.6	Ave.: 8.11				79.4	79.0	Ave.: 79.2				78.7	78.9	Ave.: 78.8										
Turbidity (NTU)	:	5.24	5.37	Ave.: 5.31				4.97	4.91	Ave.: 4.94				4.62	4.50	Ave.: 4.56				4.94	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Conditio.**

Station: IS12 Duration: 20:04 to 20:19 Depth of Water (meter): 14.2 Wet bulb calibration for DO meter: 8.45 mg/L (99.5 %) (23.8 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.1						13.2												
Temp. (°C)	:	22.6	22.7	Ave.: 22.7				22.8	22.7	22.8				22.8	22.8	Ave.: 22.8										
pH	:	7.68	7.69	Ave.: 7.69				7.79	7.78	7.79				7.86	7.87	Ave.: 7.87										
Salinity (ppt)	:	24.2	24.3	Ave.: 24.3				24.4	24.5	Ave.: 24.5				24.7	24.8	Ave.: 24.8										
D.O. (mg/L)	:	6.30	6.28	Ave.: 6.29	5.0	4.2	✓	6.00	6.04	Ave.: 6.02	5.0	4.2	✓	5.74	5.75	Ave.: 5.75	4.7	2.0	✓							
D.O.S. (%)	:	84.4	84.1	Ave.: 84.3				80.4	80.9	Ave.: 80.7				76.9	77.0	Ave.: 77.0										
Turbidity (NTU)	:	4.81	4.98	Ave.: 4.90				4.66	4.53	Ave.: 4.60				5.16	5.05	Ave.: 5.11				4.81	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 19:44 to 19:59 Depth of Water (meter): 16.2 Wet bulb calibration for DO meter: 8.43 mg/L (99.2 %) (23.9 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.1						15.2												
Temp. (°C)	:	22.7	22.7	Ave.: 22.7				22.8	22.8	22.8				22.8	22.9	Ave.: 22.9										
pH	:	7.72	7.73	Ave.: 7.73				7.72	7.71	7.72				7.90	7.91	Ave.: 7.91										
Salinity (ppt)	:	24.3	24.3	Ave.: 24.3				24.5	24.6	Ave.: 24.6				24.7	24.7	Ave.: 24.7										
D.O. (mg/L)	:	6.20	6.17	Ave.: 6.19	5.0	4.2	✓	5.94	5.97	Ave.: 5.96	5.0	4.2	✓	5.88	5.90	Ave.: 5.89	4.7	2.0	✓							
D.O.S. (%)	:	83.0	82.6	Ave.: 8.28				79.6	79.9	Ave.: 79.8				78.7	79.0	Ave.: 78.9										
Turbidity (NTU)	:	4.83	4.70	Ave.: 4.77				4.47	4.38	Ave.: 4.43				4.49	4.58	Ave.: 4.54				4.58	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 19:19 to 19:34 Depth of Water (meter): 21.8 Wet bulb calibration for DO meter: 8.41 mg/L (99.4 %) (23.9 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			10.9			20.8					
Temp. (°C)	:	22.6	22.7	Ave.: 22.7	22.8	22.7	Ave.: 22.8	22.8	22.8	Ave.: 22.8			
pH	:	7.80	7.81	Ave.: 7.81	7.77	7.78	Ave.: 7.78	7.84	7.85	Ave.: 7.85			
Salinity (ppt)	:	24.3	24.4	Ave.: 24.4	24.6	24.6	Ave.: 24.6	24.8	24.7	Ave.: 24.8			
D.O. (mg/L)	:	6.04	6.06	Ave.: 6.05	5.88	5.90	Ave.: 5.89	5.73	5.77	Ave.: 5.75			
D.O.S. (%)	:	80.9	81.2	Ave.: 81.1	78.7	79.0	Ave.: 78.9	76.7	77.3	Ave.: 77.0		120%	130%
Turbidity (NTU)	:	3.86	3.74	Ave.: 3.80	3.99	3.93	Ave.: 3.96	3.73	3.96	Ave.: 3.85	3.87	4.64	5.03
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? Y/[✓ N] If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? Y/[✓ N] If yes, elaboration is as follows : __________

Field Operator	S. H. Lam	Checked by		Laboratory Staff		Checked by	
Date	27-11-2013	Date		Date		Date	

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Sampling Date : 29-11-2013 Weather Condition : Cloudy Ambient Temperature (°C) : 20 Sea Conditions: Calm / Small Wave / [✓ Great Wave] Tide Mode: Ebb Tide Direction of water current: From CS4 to CS6

Station: CS6 Duration: 11:05 to 11:24 Depth of Water (meter): 13.1 Wet bulb calibration for DO meter: 8.40 mg/L (99.7 %) (24.1 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			6.6			12.1				
Temp. (°C)	:	22.9	22.8	Ave.: 22.9	22.8	22.8	Ave.: 22.8	22.7	22.8	Ave.: 22.8		
pH	:	7.66	7.64	Ave.: 7.65	7.63	7.61	Ave.: 7.62	7.66	7.68	Ave.: 7.67		
Salinity (ppt)	:	24.2	24.3	Ave.: 24.3	24.5	24.4	Ave.: 24.5	24.8	24.9	Ave.: 24.9		
D.O. (mg/L)	:	6.17	6.19	Ave.: 6.18	6.02	6.00	Ave.: 6.01	5.94	5.96	Ave.: 5.95		
D.O.S. (%)	:	82.7	83.0	Ave.: 82.9	81.0	80.8	Ave.: 80.9	80.0	80.3	Ave.: 80.2		
Turbidity (NTU)	:	2.35	2.37	Ave.: 2.36	3.83	3.92	Ave.: 3.88	3.34	3.41	Ave.: 3.38	3.20	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

Station: SR10a (FCZ) Duration: 10:36 to 10:55 Depth of Water (meter): 14.2 Wet bulb calibration for DO meter: 8.43 mg/L (99.8 %) (24.2 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.1						13.2												
Temp. (°C)	:	22.7	22.8	Ave.: 22.8				22.9	22.9	22.9				23.0	22.9	Ave.: 23.0										
pH	:	7.59	7.61	Ave.: 7.60				7.64	7.66	7.65				7.61	7.63	Ave.: 7.62										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.5	24.6	Ave.: 24.6				24.9	25.0	Ave.: 25.0										
D.O. (mg/L)	:	6.29	6.27	Ave.: 6.28	5.0	5.0	✓	6.10	6.07	Ave.: 6.09	5.0	5.0	✓	5.89	5.91	Ave.: 5.90	4.7	2.0	✓							
D.O.S. (%)	:	84.3	84.1	Ave.: 84.2				82.0	81.6	Ave.: 81.8				79.3	79.6	Ave.: 79.5										
Turbidity (NTU)	:	2.41	2.47	Ave.: 2.44				3.46	3.49	Ave.: 3.48				3.19	3.22	Ave.: 3.21				3.04	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: SR8 Duration: 10:15 to 10:31 Depth of Water (meter): 5.5 Wet bulb calibration for DO meter: 8.40 mg/L (99.6 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.5												
Temp. (°C)	:	22.8	22.7	Ave.: 22.8										22.9	22.9	Ave.: 22.9										
pH	:	7.69	7.71	Ave.: 7.70										7.74	7.76	Ave.: 7.75										
Salinity (ppt)	:	24.7	24.8	Ave.: 24.8						Ave.:				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.07	6.09	Ave.: 6.08	5.0	4.2	✓			Ave.:	5.0	4.2		5.94	5.92	Ave.: 5.93	4.7	2.0	✓							
D.O.S. (%)	:	81.8	82.0	Ave.: 81.9						Ave.:				80.1	79.7	Ave.: 79.9										
Turbidity (NTU)	:	4.58	4.63	Ave.: 4.01						Ave.:				3.66	3.71	Ave.: 3.69				4.15	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: SR9 Duration: 09:54 to 10:10 Depth of Water (meter): 5.4 Wet bulb calibration for DO meter: 8.45 mg/L (99.5 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						2.7						4.4												
Temp. (°C)	:	22.8	22.9	Ave.: 22.9										22.9	22.9	Ave.: 22.9										
pH	:	7.68	7.70	Ave.: 7.69										7.74	7.76	Ave.: 7.75										
Salinity (ppt)	:	24.7	24.8	Ave.: 24.8						Ave.:				24.9	24.8	Ave.: 24.9										
D.O. (mg/L)	:	6.17	6.15	Ave.: 6.16	5.0	4.2	✓			Ave.:	5.0	4.2		5.84	5.82	Ave.: 5.83	4.7	2.0	✓							
D.O.S. (%)	:	83.0	82.7	Ave.: 82.9						Ave.:				78.7	78.4	Ave.: 78.6										
Turbidity (NTU)	:	3.78	3.80	Ave.: 3.79						Ave.:				3.62	3.64	Ave.: 3.63				3.71	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS15 Duration: 09:30 to 09:49 Depth of Water (meter): 11.4 Wet bulb calibration for DO meter: 8.46 mg/L (99.8 %) (24.2 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.7						10.4												
Temp. (°C)	:	22.9	22.8	Ave.: 22.8				22.9	22.9	22.9				23.0	22.9	Ave.: 23.0										
pH	:	7.69	7.67	Ave.: 7.68				7.72	7.71	7.71				7.74	7.76	Ave.: 7.75										
Salinity (ppt)	:	24.3	24.2	Ave.: 24.3				24.7	24.8	Ave.: 24.8				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.07	6.05	Ave.: 6.06	5.0	4.2	✓	5.91	5.89	Ave.: 5.90	5.0	4.2	✓	5.77	5.79	Ave.: 5.78	4.7	2.0	✓							
D.O.S. (%)	:	81.4	81.1	Ave.: 81.3				79.5	79.2	Ave.: 79.4				77.7	78.0	Ave.: 77.9										
Turbidity (NTU)	:	2.51	2.57	Ave.: 2.54				3.25	3.29	Ave.: 3.27				2.44	2.48	Ave.: 2.46				2.76	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS13 Duration: 09:06 to 09:25 Depth of Water (meter): 11.2 Wet bulb calibration for DO meter: 8.44 mg/L (99.4 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.6						10.2												
Temp. (°C)	:	22.8	22.8	Ave.: 22.8				22.9	22.8	22.9				23.0	23.0	Ave.: 23.0										
pH	:	7.71	7.73	Ave.: 7.72				7.76	7.78	7.77				7.71	7.69	Ave.: 7.70										
Salinity (ppt)	:	24.2	24.2	Ave.: 24.2				24.9	24.8	Ave.: 24.9				25.0	24.9	Ave.: 25.0										
D.O. (mg/L)	:	6.00	5.98	Ave.: 5.99	5.0	4.2	✓	5.80	5.78	Ave.: 5.79	5.0	4.2	✓	5.71	5.73	Ave.: 5.72	4.7	2.0	✓							
D.O.S. (%)	:	80.5	80.2	Ave.: 80.3				78.0	77.7	Ave.: 77.9				76.9	77.2	Ave.: 77.1										
Turbidity (NTU)	:	2.58	2.64	Ave.: 2.61				2.98	3.01	Ave.: 3.00				2.97	2.90	Ave.: 2.94				2.85	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Ebb Condition)**

Station: IS12 Duration: 08:42 to 09:01 Depth of Water (meter): 15.2 Wet bulb calibration for DO meter: 8.42 mg/L (99.8 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.6						14.2												
Temp. (°C)	:	22.7	22.8	Ave.: 22.8				22.9	22.9	22.9				23.0	22.9	Ave.: 23.0										
pH	:	7.60	7.62	Ave.: 7.61				7.67	7.69	7.68				7.71	7.73	Ave.: 7.72										
Salinity (ppt)	:	24.3	24.3	Ave.: 24.3				24.5	24.6	Ave.: 24.6				24.8	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.21	6.23	Ave.: 6.22	5.0	4.2	✓	6.13	6.11	Ave.: 6.12	5.0	4.2	✓	6.00	5.98	Ave.: 5.99	4.7	2.0	✓							
D.O.S. (%)	:	83.3	83.5	Ave.: 83.4				82.4	82.2	Ave.: 82.3				80.8	80.6	Ave.: 80.7										
Turbidity (NTU)	:	2.43	2.47	Ave.: 2.45				3.42	3.49	Ave.: 3.46				3.09	3.13	Ave.: 3.11				3.01	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: IS14 Duration: 08:18 to 08:37 Depth of Water (meter): 17.0 Wet bulb calibration for DO meter: 8.45 mg/L (99.9 %) (24.2 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.5						16.0												
Temp. (°C)	:	22.9	22.8	Ave.: 22.9				22.8	22.8	22.8				22.9	22.8	Ave.: 22.9										
pH	:	7.71	7.69	Ave.: 7.70				7.67	7.65	7.66				7.76	7.77	Ave.: 7.77										
Salinity (ppt)	:	24.4	24.3	Ave.: 24.4				24.7	24.6	Ave.: 24.7				24.9	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.19	6.17	Ave.: 6.18	5.0	4.2	✓	6.09	6.07	Ave. 6.08	5.0	4.2	✓	5.92	5.90	Ave.: 5.91	4.7	2.0	✓							
D.O.S. (%)	:	83.0	82.7	Ave.: 82.9				81.9	81.6	Ave.: 81.7				79.7	79.5	Ave.: 79.6										
Turbidity (NTU)	:	2.63	2.69	Ave.: 2.66				2.98	3.02	Ave.: 3.00				3.34	3.41	Ave.: 3.38				3.01	✓	27.5 and 120% of CS4	27.5	47.0 and 130% of CS4	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS4		34.4 and 130% of CS4		

Station: CS4(Upstream Control Station) Duration: 07:54 to 08:13 Depth of Water (meter): 23.1 Wet bulb calibration for DO meter: 8.42 mg/L (99.7 %) (24.1 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			11.6			22.1					
Temp. (°C)	:	22.8	22.8	Ave.: 22.8	22.9	22.8	Ave.: 22.9	23.0	23.0	Ave.: 23.0			
pH	:	7.69	7.68	Ave.: 7.69	7.74	7.76	Ave.: 7.75	7.80	7.78	Ave.: 7.79			
Salinity (ppt)	:	24.3	24.3	Ave.: 24.3	24.5	24.6	Ave.: 24.6	24.8	24.9	Ave.: 24.9			
D.O. (mg/L)	:	6.21	6.23	Ave.: 6.22	6.15	6.17	Ave.: 6.16	6.02	6.00	Ave.: 6.01			
D.O.S. (%)	:	83.3	83.6	Ave.: 83.5	82.7	83.0	Ave.: 82.9	81.1	80.9	Ave.: 81.0		120%	130%
Turbidity (NTU)	:	2.34	2.41	Ave.: 2.38	3.89	3.82	Ave.: 3.86	2.77	2.84	Ave.: 2.81	3.01	3.61	3.92
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Any notable discoloration of water ? ~~Y~~ / N If yes, elaboration is as follows: __________

Any notable pollutant by others near monitoring site ? ~~Y~~ / N If yes, elaboration is as follows : __________

Field Operator	Tang Chung Hong	Checked by		Laboratory Staff		Checked by	
Date	29-11-2013	Date	29/11/13	Date		Date	

Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Sampling Date : 29. 11. 2013 Weather Condition : Fine Ambient Temperature (°C) : 20°C Sea Conditions: Calm / Small Wave / [✓ Great Wave] Tide Mode: Flood Tide Direction of water current: From CS6 to CS4

Station: CS6 (Upstream Control Station) Duration: 14:05 to 14:24 Depth of Water (meter): 13.9 Wet bulb calibration for DO meter: 84.3 mg/L (99.8 %) (24.1 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK	
Depth (meter)	:	1.0			7.0			12.9					
Temp. (°C)	:	22.9	22.9	Ave.: 22.9	23.0	23.1	Ave.: 23.1	23.1	23.1	Ave.: 23.1			
pH	:	7.62	7.63	Ave.: 7.63	7.60	7.58	Ave.: 7.60	7.61	7.60	Ave.: 7.61			
Salinity (ppt)	:	24.1	24.2	Ave.: 24.2	24.4	24.5	Ave.: 24.5	24.7	24.8	Ave.: 24.8			
D.O. (mg/L)	:	6.20	6.22	Ave.: 6.2	6.10	6.11	Ave.: 6.11	6.04	6.02	Ave.: 6.03			
D.O.S. (%)	:	83.1	83.4	Ave.: 83.3	820	82.1	Ave.: 821	81.3	81.2	Ave.: 813		120%	130%
Turbidity (NTU)	:	2.32	2.31	Ave.: 2.32	3.80	3.78	Ave.: 3.79	3.31	3.37	Ave.: 3.34	3.18	3.78?	4.09
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:			

Station: SR10a (FCZ) Duration: 14:29 to 14:48 Depth of Water (meter): 14.8 Wet bulb calibration for DO meter: 84.3 mg/L (99.8 %) (24.2 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.4						13.8												
Temp. (°C)	:	22.8	22.7	Ave.: 22.8				22.8	22.9	22.9				23.0	23.0	Ave.: 23										
pH	:	7.57	7.58	Ave.: 7.58				7.62	7.64	7.64				7.66	7.67	Ave.: 7.67										
Salinity (ppt)	:	24.2	24.1	Ave.: 24.2				24.4	24.5	Ave.: 24.5				24.8	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.32	6.33	Ave.: 6.33	5.0	5.0	✓	6.29	6.27	Ave.: 6.28	5.0	5.0	✓	6.04	6.06	Ave.: 6.05	4.7	2.0	✓							
D.O.S. (%)	:	84.8	84.9	Ave.: 84.9				84.5	84.3	Ave.: 84.4				81.2	81.6	Ave.: 81.4										
Turbidity (NTU)	:	2.38	2.41	Ave.: 2.40				3.39	3.42	Ave.: 3.4				3.08	3.11	Ave.: 3.10				2.97	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: SR8 Duration: 14:53 to 15:09 Depth of Water (meter): 5.8 Wet bulb calibration for DO meter: 84.4 mg/L (99.9 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0												4.8												
Temp. (°C)	:	22.8	22.7	Ave.: 22.8										22.8	22.9	Ave.: 22.9										
pH	:	7.65	7.66	Ave.: 7.66										7.70	7.71	Ave.: 7.71										
Salinity (ppt)	:	24.8	24.8	Ave.: 24.8						Ave.:				25.0	25.1	Ave.: 25.0										
D.O. (mg/L)	:	6.14	6.16	Ave.: 6.15	5.0	4.2	✓			Ave.:	5.0	4.2		6.07	6.08	Ave.: 6.08	4.7	2.0	✓							
D.O.S (%)	:	82.3	82.7	Ave.: 82.5						Ave.:				81.6	81.7	Ave.: 81.7										
Turbidity (NTU)	:	4.53	4.52	Ave.: 4.53						Ave.:				3.62	3.64	Ave.: 3.63				4.08	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**

Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Station: SR9 Duration: 1514 to 1530 Depth of Water (meter): 5.7 Wet bulb calibration for DO meter: 8.44 mg/L (99.4 %) (24.2 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						2.9						4.7												
Temp. (°C)	:	22.7	22.8	Ave.: 22.8										22.9	23.0	Ave.: 23.0										
pH	:	7.65	7.66	Ave.: 7.66										7.71	7.73	Ave.: 7.72										
Salinity (ppt)	:	24.6	24.7	Ave.: 24.7						Ave.:				24.8	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.27	6.29	Ave.: 6.28	5.0	4.2	✓			Ave.:	5.0	4.2		5.96	5.98	Ave.: 5.97	4.7	2.0	✓							
D.O.S. (%)	:	84.3	84.6	Ave.: 84.5						Ave.:				80.3	80.6	Ave.: 80.5										
Turbidity (NTU)	:	3.63	3.61	Ave.: 3.62						Ave.:				3.45	3.41	Ave.: 3.43				3.53	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS15 Duration: 1535 to 15:54 Depth of Water (meter): 11.6 Wet bulb calibration for DO meter: 8.47 mg/L (99.8 %) (24.2 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.8						10.6												
Temp. (°C)	:	22.9	22.8	Ave.: 22.9				23.0	22.9	23.0				23.1	23.0	Ave.: 23.0										
pH	:	7.64	7.62	Ave.: 7.63				7.65	7.66	7.66				7.72	7.73	Ave.: 7.73										
Salinity (ppt)	:	24.4	24.3	Ave.: 24.4				24.8	24.6	Ave.: 24.7				24.8	24.9	Ave.: 24.9										
D.O. (mg/L)	:	6.14	6.12	Ave.: 6.11	5.0	4.2	✓	6.04	6.04	Ave.: 6.04	5.0	4.2	✓	5.88	5.87	Ave.: 5.88	4.7	2.0	✓							
D.O.S. (%)	:	82.3	82.1	Ave.: 82.2				81.2	81.3	Ave.: 81.3				79.1	79.0	Ave.: 79.1										
Turbidity (NTU)	:	2.34	2.38	Ave.: 2.36				3.06	3.05	Ave.: 3.06				2.23	2.25	Ave.: 2.24				2.55	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS13 Duration: 15:59 to 1618 Depth of Water (meter): 11.5 Wet bulb calibration for DO meter: 8.41 mg/L (99.2 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						5.8						10.5												
Temp. (°C)	:	22.7	22.8	Ave.: 22.8				22.9	22.9	22.9				23.0	23.1	Ave.: 23.1										
pH	:	7.68	7.66	Ave. 7.67				7.70	7.69	7.70				7.67	7.66	Ave.: 7.67										
Salinity (ppt)	:	24.1	24.2	Ave.: 24.2				24.8	24.9	Ave.: 24.9				25.1	25.0	Ave.: 25.1										
D.O. (mg/L)	:	6.14	6.16	Ave.: 6.15	5.0	4.2	✓	6.07	6.08	Ave.: 6.08	5.0	4.2	✓	5.94	5.93	Ave.: 5.94	4.7	2.0	✓							
D.O.S. (%)	:	82.3	82.6	Ave.: 82.5				81.6	81.8	Ave.: 81.7				80.0	79.8	Ave.: 79.9										
Turbidity (NTU)	:	2.41	2.42	Ave.: 2.42				2.67	2.66	Ave.: 2.67				2.75	2.72	Ave.: 2.74				2.61	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Tuen Mun – Chek Lap Kok Link – **Northern**
Impact Water Quality Monitoring - Data Record Sheet **(Flood Condition)**

Station: IS12 Duration: 1623 to 1642 Depth of Water (meter): 15.5 Wet bulb calibration for DO meter: 8.43 mg/L (99.9 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						7.8						14.5												
Temp. (°C)	:	22.8	22.9	Ave.: 22.9				22.8	22.8	22.8				22.9	23.1	Ave.: 23.0										
pH	:	7.51	7.53	Ave.: 7.52				7.64	7.65	7.65				7.69	7.68	Ave.: 7.69										
Salinity (ppt)	:	24.2	24.3	Ave.: 24.3				24.3	24.5	Ave. 24.4				24.7	24.8	Ave.: 24.8										
D.O. (mg/L)	:	6.44	6.41	Ave.: 6.43	5.0	4.2	✓	6.25	6.27	Ave.: 6.26	5.0	4.2	✓	6.17	6.19	Ave.: 6.18	4.7	2.0	✓							
D.O.S. (%)	:	86.4	86.0	Ave.: 86.2				84.0	84.3	Ave.: 84.2				83.1	83.4	Ave.: 83.3										
Turbidity (NTU)	:	2.23	2.21	Ave.: 2.22				3.12	3.15	Ave.: 3.14				2.85	2.83	Ave.: 2.84				2.73	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: IS14 Duration: 1647 to 1706 Depth of Water (meter): 17.3 Wet bulb calibration for DO meter: 8.44 mg/L (99.8 %) (24.1 °C)

		SURFACE (S)			Action	Limit	√/A/L	MIDDLE (M)			Action	Limit	√/A/L	BOTTOM (B)			Action	Limit	√/A/L	DEPTH AVE.	√/A/L	ACTION		LIMIT		REMARK
Depth (meter)	:	1.0						8.2						16.3												
Temp. (°C)	:	22.9	23.0	Ave.: 23.0				22.8	22.9	22.9				22.9	22.9	Ave.: 22.9										
pH	:	7.68	7.67	Ave.: 7.68				7.59	7.58	7.59				7.61	7.63	Ave.: 7.62										
Salinity (ppt)	:	24.4	24.5	Ave.: 24.5				25.0	25.2	Ave.: 25.1				25.1	25.3	Ave.: 25.2										
D.O. (mg/L)	:	6.31	6.32	Ave.: 6.32	5.0	4.2	✓	6.20	6.23	Ave.: 6.22	5.0	4.2	✓	6.14	6.19	Ave.: 6.17	4.7	2.0	✓							
D.O.S. (%)	:	84.6	84.8	Ave.: 84.7				83.3	83.7	Ave.: 83.5				82.6	82.8	Ave.: 82.7										
Turbidity (NTU)	:	2.41	2.43	Ave.: 2.42				2.64	2.67	Ave.: 2.66				3.15	3.18	Ave.: 3.17				2.75	✓	27.5 and 120% of CS6	27.5	47.0 and 130% of CS6	47.0	
S.S. (mg/L)	:			Ave.:						Ave.:						Ave.:						23.5 and 120% of CS6		34.4 and 130% of CS6		

Station: CS4 Duration: 1711 to 1730 Depth of Water (meter): 23.4 Wet bulb calibration for DO meter: 8.41 mg/L (99.7 %) (24.2 °C)

		SURFACE			MIDDLE			BOTTOM			DEPTH AVERAGE	REMARK
Depth (meter)	:	1.0			11.7			22.4				
Temp. (°C)	:	22.9	22.8	Ave.: 22.9	22.9	23.0	Ave.: 23.0	23.1	23.2	Ave.:		
pH	:	7.54	7.55	Ave.: 7.55	7.63	7.62	Ave.: 7.63	7.72	7.74	Ave.: 7.73		
Salinity (ppt)	:	24.2	24.4	Ave.: 24.3	24.4	24.7	Ave.: 24.6	24.9	24.9	Ave.: 24.9		
D.O. (mg/L)	:	6.25	6.24	Ave.: 6.25	6.23	6.24	Ave.: 6.24	6.14	6.12	Ave.: 6.13		
D.O.S. (%)	:	83.8	83.7	Ave.: 83.8	83.7	83.9	Ave.: 83.8	82.6	82.3	Ave.: 82.5		
Turbidity (NTU)	:	2.47	2.46	Ave.: 2.47	2.59	2.62	Ave.: 2.61	3.14	3.12	Ave.: 3.13	2.73	
S.S. (mg/L)	:			Ave.:			Ave.:			Ave.:		

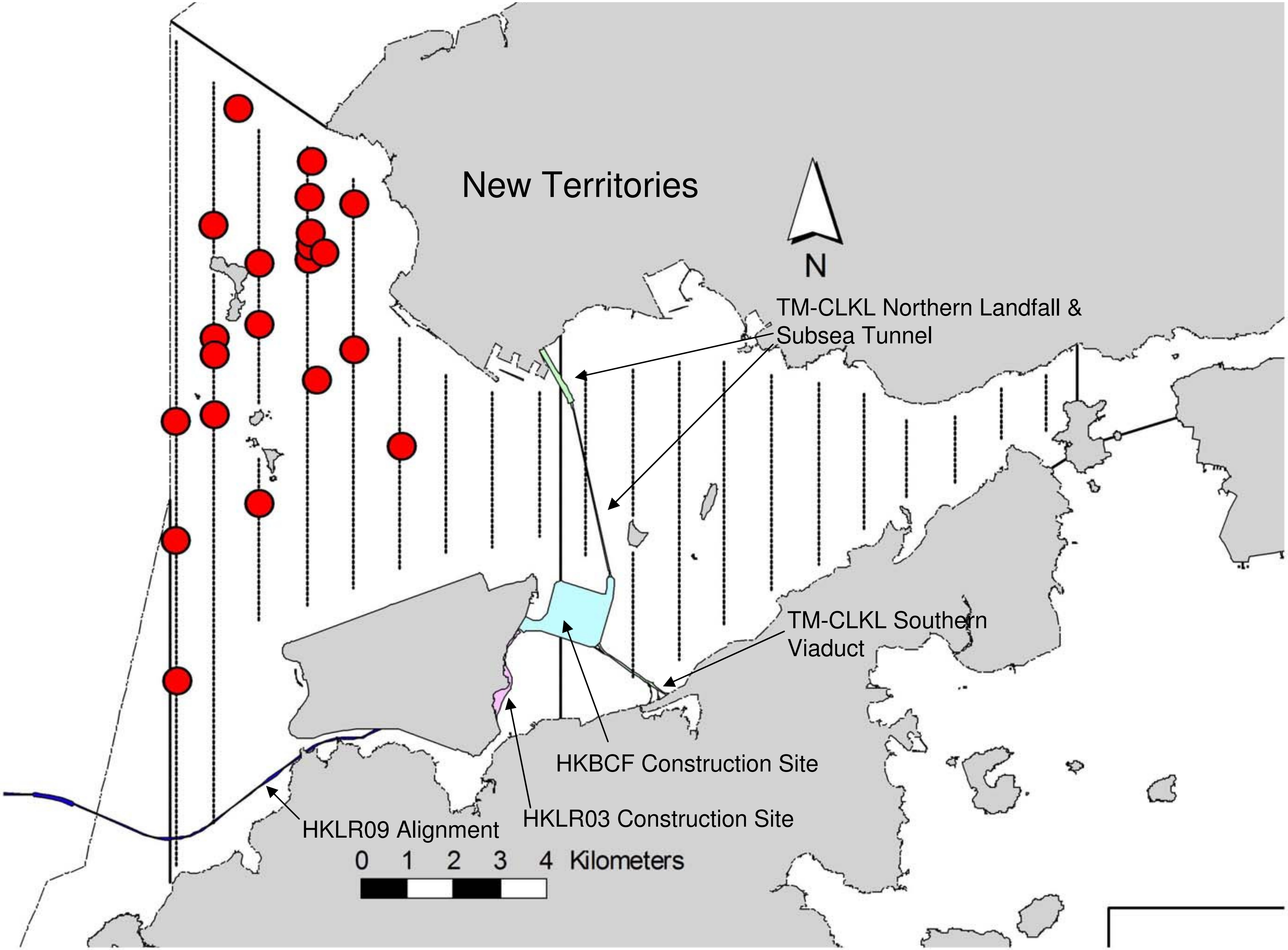
Any notable discoloration of water ? Y [✓ N] If yes, elaboration is as follows: /

Any notable pollutant by others near monitoring site ? Y [✓ N] If yes, elaboration is as follows : /

Field Operator	Sunny Tang	Checked by		Laboratory Staff		Checked by	
Date	29. 11. 2013	Date	29/11/13	Date		Date	

Appendix J

Impact Dolphin Monitoring Survey



Distribution of Chinese White Dolphin Sightings During November 2013 HKLR03 Monitoring Surveys

Appendix I. HKLR03 Survey Effort Database (November 2013)

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

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
1-Nov-13	NW LANTAU	1	6.43	AUTUMN	STANDARD31516	HKLR	P
1-Nov-13	NW LANTAU	2	28.32	AUTUMN	STANDARD31516	HKLR	P
1-Nov-13	NW LANTAU	3	19.23	AUTUMN	STANDARD31516	HKLR	P
1-Nov-13	NW LANTAU	1	2.25	AUTUMN	STANDARD31516	HKLR	S
1-Nov-13	NW LANTAU	2	5.73	AUTUMN	STANDARD31516	HKLR	S
1-Nov-13	NW LANTAU	3	4.87	AUTUMN	STANDARD31516	HKLR	S
1-Nov-13	NE LANTAU	2	3.67	AUTUMN	STANDARD31516	HKLR	P
5-Nov-13	NE LANTAU	2	34.75	AUTUMN	STANDARD31516	HKLR	P
5-Nov-13	NE LANTAU	2	10.65	AUTUMN	STANDARD31516	HKLR	S
5-Nov-13	NW LANTAU	2	13.99	AUTUMN	STANDARD31516	HKLR	P
5-Nov-13	NW LANTAU	2	6.61	AUTUMN	STANDARD31516	HKLR	S
8-Nov-13	NW LANTAU	0	1.73	AUTUMN	STANDARD31516	HKLR	P
8-Nov-13	NW LANTAU	1	10.57	AUTUMN	STANDARD31516	HKLR	P
8-Nov-13	NW LANTAU	2	39.88	AUTUMN	STANDARD31516	HKLR	P
8-Nov-13	NW LANTAU	3	1.50	AUTUMN	STANDARD31516	HKLR	P
8-Nov-13	NW LANTAU	1	1.29	AUTUMN	STANDARD31516	HKLR	S
8-Nov-13	NW LANTAU	2	5.53	AUTUMN	STANDARD31516	HKLR	S
8-Nov-13	NW LANTAU	3	2.36	AUTUMN	STANDARD31516	HKLR	S
13-Nov-13	NE LANTAU	1	5.70	AUTUMN	STANDARD31516	HKLR	P
13-Nov-13	NE LANTAU	2	21.79	AUTUMN	STANDARD31516	HKLR	P
13-Nov-13	NE LANTAU	3	9.60	AUTUMN	STANDARD31516	HKLR	P
13-Nov-13	NE LANTAU	2	11.71	AUTUMN	STANDARD31516	HKLR	S
13-Nov-13	NE LANTAU	3	1.10	AUTUMN	STANDARD31516	HKLR	S
13-Nov-13	NW LANTAU	1	1.93	AUTUMN	STANDARD31516	HKLR	P
13-Nov-13	NW LANTAU	2	5.89	AUTUMN	STANDARD31516	HKLR	P
13-Nov-13	NW LANTAU	3	6.87	AUTUMN	STANDARD31516	HKLR	P
13-Nov-13	NW LANTAU	2	4.22	AUTUMN	STANDARD31516	HKLR	S

Appendix II. HKLR03 Chinese White Dolphin Sighting Database (November 2013)

(Abberviations: 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 Lines)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
1-Nov-13	1	1049	4	NW LANTAU	2	74	ON	HKLR	823145	809509	AUTUMN	NONE	P
1-Nov-13	2	1152	3	NW LANTAU	3	214	ON	HKLR	826947	807517	AUTUMN	NONE	P
1-Nov-13	3	1203	7	NW LANTAU	3	159	ON	HKLR	827235	807539	AUTUMN	NONE	P
1-Nov-13	4	1225	1	NW LANTAU	2	137	ON	HKLR	827490	807539	AUTUMN	NONE	P
1-Nov-13	5	1236	3	NW LANTAU	2	358	ON	HKLR	828232	807530	AUTUMN	NONE	P
1-Nov-13	6	1252	7	NW LANTAU	2	ND	OFF	HKLR	828941	807583	AUTUMN	NONE	
1-Nov-13	7	1312	4	NW LANTAU	2	72	ON	HKLR	830018	805999	AUTUMN	NONE	S
1-Nov-13	8	1458	11	NW LANTAU	3	60	ON	HKLR	821228	804642	AUTUMN	NONE	P
5-Nov-13	1	1421	5	NW LANTAU	2	378	ON	HKLR	828097	808508	AUTUMN	NONE	P
8-Nov-13	1	1041	4	NW LANTAU	1	302	ON	HKLR	824489	807678	AUTUMN	NONE	P
8-Nov-13	2	1103	8	NW LANTAU	2	694	ON	HKLR	827091	807858	AUTUMN	NONE	P
8-Nov-13	3	1152	7	NW LANTAU	3	299	ON	HKLR	827660	805459	AUTUMN	NONE	P
8-Nov-13	4	1215	9	NW LANTAU	2	756	ON	HKLR	825357	805465	AUTUMN	NONE	P
8-Nov-13	5	1232	5	NW LANTAU	2	ND	OFF	HKLR	825025	805464	AUTUMN	NONE	
8-Nov-13	6	1249	4	NW LANTAU	2	7	ON	HKLR	823806	805462	AUTUMN	NONE	P
8-Nov-13	7	1400	2	NW LANTAU	2	155	ON	HKLR	818382	804657	AUTUMN	NONE	P
8-Nov-13	8	1426	8	NW LANTAU	2	149	ON	HKLR	823675	804648	AUTUMN	NONE	P
8-Nov-13	9	1526	1	NW LANTAU	2	45	ON	HKLR	826872	806446	AUTUMN	NONE	P
8-Nov-13	10	1536	4	NW LANTAU	1	225	ON	HKLR	825643	806454	AUTUMN	NONE	P
8-Nov-13	11	1606	4	NW LANTAU	2	223	ON	HKLR	821988	806457	AUTUMN	NONE	P
13-Nov-13	1	1451	1	NW LANTAU	3	343	ON	HKLR	825118	808482	AUTUMN	NONE	P

Annex K

Event and Action Plan

Event and Action Plan for Impact Air Monitoring

	Action			
	ET [(a)]	**IEC** [(a)]	**SOR** [(a)]	**Contractor(s)**
Action Level				
Exceedance recorded	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.	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.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented.	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	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.	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.	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.	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	1. Repeat *in situ* measurement on next day of exceedance to confirm findings; 2. Identify source(s) of impact; 3. Inform IEC, contractor and SOR; 4. Check monitoring data, all plant, equipment and Contractor's working methods.	1. Check monitoring data submitted by ET and Contractor's working methods.	1. Confirm receipt of notification of non-compliance in writing; 2. Notify Contractor.	1. Inform the SOR and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling days	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 Action level;	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 proposed mitigation measures submitted by Contractor and advise the SOR accordingly; 4. Supervise the implementation of mitigation measures.	1. Discuss with IEC on the proposed mitigation measures; 2. Ensure mitigation measures are properly implemented; 3. Assess the effectiveness of the implemented mitigation measures.	1. Inform the Supervising Officer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment and consider changes of working methods; 4. Submit proposal of additional mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; 5. Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	1. Repeat measurement on next day of exceedance to confirm findings;	1. Check monitoring data submitted by ET and	1. Confirm receipt of notification of failure in	1. Inform the SOR and confirm notification of the

Event	ET Leader	IEC	SOR	Contractor
	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 6. IEC, SOR and Contractor;	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.	writing; 2. Discuss with IEC, ET and Contractor on the proposed mitigation measures; 3. Request Contractor to review the working methods.	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	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;	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.	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.	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	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.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and finding with the ET and the Contractor.	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.	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	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;	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	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	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**
	3. Identify source(s) of impact; 4. Inform the IEC, SOR and Contractor of findings; 5. Check monitoring data; 6. Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. 7. If ET proves that the source of impact is caused by any of the construction activity by the works contract, ET to arrange a meeting to discuss with IEC, SOR and Contractor the necessity of additional dolphin monitoring and/or any other potential mitigation measures (e.g., consider to modify the perimeter silt curtain or consider to control/temporarily stop relevant construction activity etc.) and submit to IEC a proposal of additional dolphin monitoring and/or mitigation measures where necessary.	Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures. 4. Review proposals for additional monitoring and any other mitigation measures submitted by ET and Contractor and advise SOR of the results and findings accordingly. 5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise SOR the results and findings accordingly.	proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, SOR to signify the agreement in writing on such proposals and any other mitigation measures. 3. Supervise the implementation of additional monitoring and/or any other mitigation measures.	potential mitigation measures. 3. Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary. 4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.

Appendix L

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

Appendix L Cumulative Statistics on Exceedances

		Total No. recorded in this reporting month	**Total No. recorded since project commencement**
1-Hr TSP	Action	4	4
	Limit	1	1
24-Hr TSP	Action	0	0
	Limit	0	0
Water Quality	Action	0	0
	Limit	0	0
Impact Dolphin Monitoring	Action	0	0
	Limit	0	0

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

Reporting Period	**Cumulative Statistics**		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (Nov 2013)	0	0	0
Total No. received since project commencement	0	0	0

Email
message

Environmental
Resources
Management

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

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	3 December 2013

Page 1 of 8

Dear Sir or Madam,

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

0212330_07November2013_1hrTSP_Station ASR5
0212330_07November2013_1hrTSP_Station ASR10
0212330_07November2013_1hrTSP_Station AQMS1

recorded on 07 November 2013.

Regards,

Mr Jovy Tam
Environmental Team Leader

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

<table>
<tr><td>Log No.</td><td colspan="2">0212330_07November2013_1hrTSP_Station ASR5
0212330_07November2013_1hrTSP_Station ASR10
0212330_07November2013_1hrTSP_Station AQMS1
[Total No. of Exceedances = 3]</td></tr>
<tr><td>Date</td><td colspan="2">7 November 2013 (Measured)
16 November 2013 (Laboratory results received by ERM)</td></tr>
<tr><td>Monitoring Station</td><td colspan="2">ASR5, ASR10, AQMS1</td></tr>
<tr><td>Parameter(s) with Exceedance(s)</td><td colspan="2">1-hr TSP</td></tr>
<tr><td>Action Levels</td><td>1-hr TSP (µg/m^3)</td><td>ASR5 = 340
ASR10 = 337
AQMS1 = 335</td></tr>
<tr><td>Limit Levels</td><td>1-hr TSP (µg/m^3)</td><td>500</td></tr>
<tr><td>Measured Levels</td><td colspan="2">Action Level Exceedance is observed at ASR5 (413 µg/m^3) during 08:20-09:20 hrs.
Limit Level Exceedance is observed at ASR10 (645 µg/m^3) during 09:02-10:02 hrs.
Action Level Exceedance is observed at AQMS1 (431 µg/m^3) during 08:40-09:40 hrs.</td></tr>
<tr><td>Works Undertaken (at the time of monitoring event)</td><td colspan="2">On 7 November 2013, marine dredging works were carried out by one dredger GD-1.
At the time of monitoring during 08:20-10:02, dredging was undertaken by one dredger. At Site WA 18, excavation and foundation for site formation were undertaken. Erection of chain link fence and site hoarding were also being carried out.</td></tr>
<tr><td>Possible Reason for Action or Limit Level Exceedance(s)</td><td colspan="2">The exceedances are unlikely to be due to the Project, in view of the following:
• Whilst exceedance of Limit Level was observed at ASR10, the average 1-hr TSP levels (181µg/m^3) at the monitoring station were in compliance with the Action and Limit Levels on the same day. Likewise, average 1-hr TSP levels at ASR5 253µg/m^3) and AQMS1 (115µg/m^3)) were also in compliance with the Action and Limit Levels on the same day. The 1-hr TSP at ASR10, ASR5 and AQMS1 returned to level below the Action/Limit Levels on the same day.
• Monitoring station ASR10 is located distant (>1km) from the major construction works area, and the construction works is thus considered not directly associated with the observed Action/Limit Levels of Exceedances.
• Same level and extent of construction works were carried out at the same locations on 2nd November and 13th November 2013 while no exceedance was recorded on these two days.
• According to the Contractor's work activity schedule, marine dredging works at Portion N-a was the major ongoing construction works area. At Site WA 18, the level of construction works is considered to be minor and is thus not considered to induce the observed exceedance directly.
• With reference to the recorded wind direction (ranged from 124° to 162 °, blowing to a southeasterly direction) and wind speed (ranged from 1.07 to 1.83), Stations ASR5, ASR10, AQMS1 are located upstream of the major construction activities at dredging barge GD-1 at Portion N-a and should thus not be affected by the dust, if any, generated by the concerned construction activities.
• As stated in the EIA report (Section 4.2.3), the background value of Tuen Mun is higher than the other region of Hong Kong, thus the exceedance may be also contributed by the other construction works / traffic within the Tuen Mun Area rather than causing by the construction works of the Project.</td></tr>
</table>

Actions Taken / To Be Taken	The Contractor was reminded to ensure all dust mitigating measures are provided at WA 18. The ET will monitor for future trends in exceedances.
Remarks	The monitoring results, the locations of air quality monitoring stations, wind data and construction works schedule are attached.

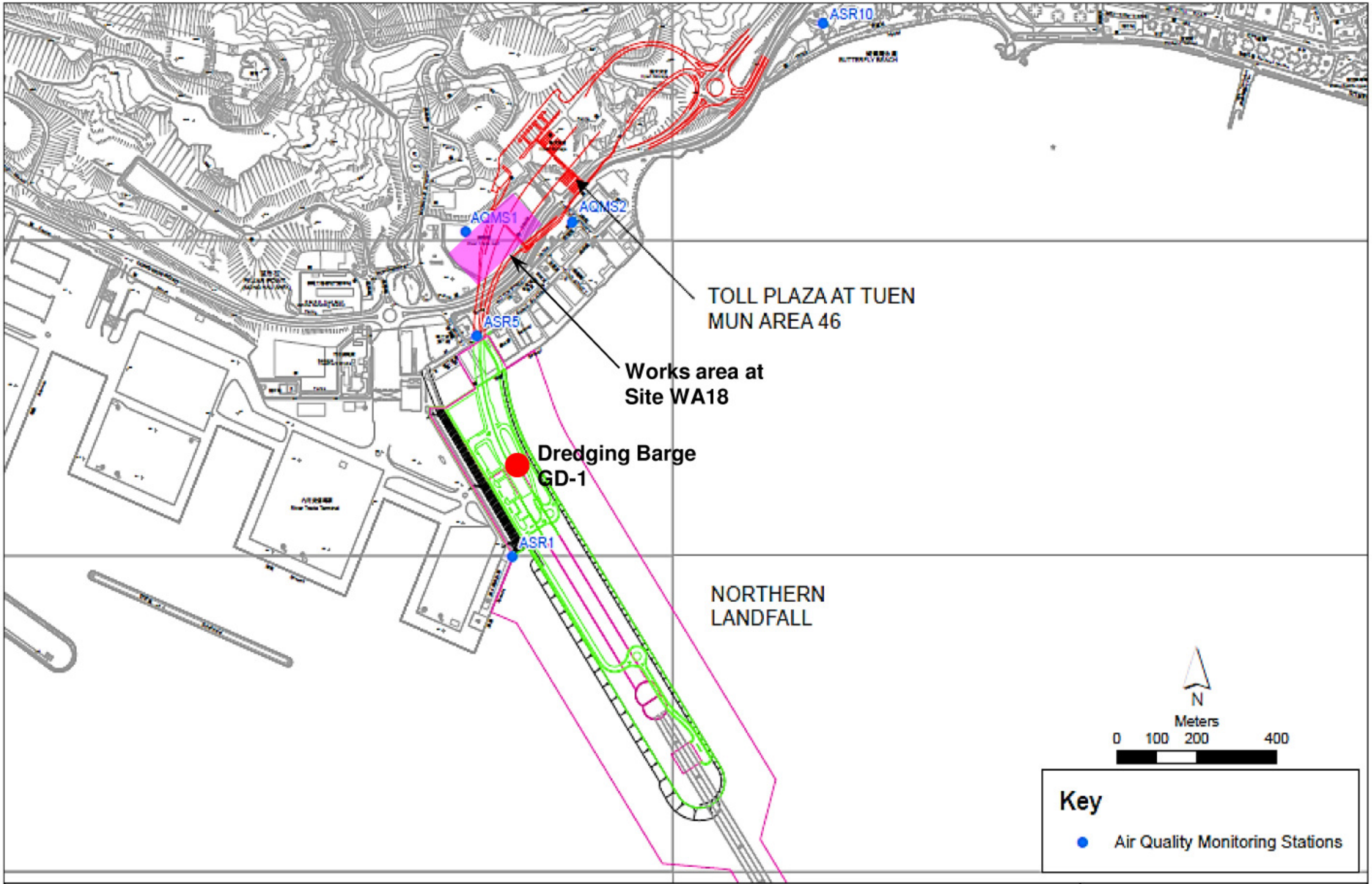


Figure 1

Indicative Construction Works Area on 7 November 2013

DATE: 06/03/2013

Environmental
Resources
Management

ERM

Project	Works	Date	Station	Weather	Start time	End Time (hh:mm, 24	Parameters	Results	units
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	08:08	09:08	1-hour TSP	213	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	09:10	10:10	1-hour TSP	267	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS2	S	10:12	11:12	1-hour TSP	220	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	08:40	09:40	1-hour TSP	145	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	09:40	10:40	1-hour TSP	266	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	AQMS1	S	10:40	11:40	1-hour TSP	159	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	08:00	09:00	1-hour TSP	173	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	09:02	10:02	1-hour TSP	248	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR10	S	10:04	11:04	1-hour TSP	116	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	08:30	09:30	1-hour TSP	164	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	09:32	10:32	1-hour TSP	184	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR1	S	10:34	11:34	1-hour TSP	147	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	08:20	09:20	1-hour TSP	192	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	09:22	10:22	1-hour TSP	268	µg/m^3
TMCLKL	HY/2012/08	2013/11/02	ASR5	S	10:24	11:24	1-hour TSP	252	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	08:30	09:30	1-hour TSP	257	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	09:32	10:32	1-hour TSP	119	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR1	S	10:34	11:34	1-hour TSP	123	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	08:20	09:20	1-hour TSP	413	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	09:22	10:22	1-hour TSP	247	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR5	S	10:24	11:24	1-hour TSP	259	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	08:08	09:08	1-hour TSP	332	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	09:10	10:10	1-hour TSP	203	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS2	S	10:12	11:12	1-hour TSP	196	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR10	S	08:00	09:00	1-hour TSP	195	µg/m^3
TMCLKL	HY/2012/08	2013/11/07	ASR10	S	09:02	10:02	1-hour TSP	645	µg/m^3

TMCLKL	HY/2012/08	2013/11/07	ASR10	S	10:04	11:04	1-hour TSP	167	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	08:40	09:40	1-hour TSP	431	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	09:42	10:42	1-hour TSP	112	μg/m^3
TMCLKL	HY/2012/08	2013/11/07	AQMS1	S	10:44	11:44	1-hour TSP	118	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	AQMS1	S	10:47	11:47	1-hour TSP	46	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	AQMS1	S	09:45	10:45	1-hour TSP	38	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	AQMS1	S	08:43	09:43	1-hour TSP	81	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR10	S	10:04	11:04	1-hour TSP	60	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR10	S	09:02	10:02	1-hour TSP	87	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR10	S	08:00	09:00	1-hour TSP	184	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	AQMS2	S	08:10	09:10	1-hour TSP	167	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	AQMS2	S	10:14	11:14	1-hour TSP	81	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	AQMS2	S	09:12	10:12	1-hour TSP	69	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR5	S	10:24	11:24	1-hour TSP	85	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR5	S	09:22	10:22	1-hour TSP	122	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR5	S	08:20	09:20	1-hour TSP	88	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR1	S	09:34	10:34	1-hour TSP	69	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR1	S	08:32	09:32	1-hour TSP	79	μg/m^3
TMCLKL	HY/2012/08	2013/11/13	ASR1	S	10:36	11:36	1-hour TSP	73	μg/m^3

Row Labels	Average of Wind direction	Average of Wind speed
0:00	179	0.38
1:00	231	0.35
2:00	161	0.44
3:00	198	0.51
4:00	271	0.49
5:00	176	0.37
6:00	110	0.95
7:00	104	1.60
8:00	124	1.60
9:00	130	1.83
10:00	162	1.07
11:00	167	1.22
12:00	142	1.48
13:00	158	1.43
14:00	166	1.38
15:00	161	1.38
Grand Total	167	0.99

Cont. No. : HY/2012/08 - Tuen Mum - Chek Lap Kok Link Northern Connection Sub-Sea Tunnel Section

Item no.	Description	Date of start	Date of finish	Duration	Incharge	Nov																														
									Wk 46							Wk 47							Wk 48							Wk 49						
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1
						F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
1.1.1	General site clearance	07/10/2013	12/10/2013	6	DBJV																															
	Utilities Detection																																			
1.1.2	Utilities survey / detection	15/10/2013	17/10/2013	3	APC																															
	Chain Link Fence / Hoarding																																			
1.1.3	Survey setting out - chain link fence / site hoarding / main gates	10/10/2013	11/10/2013	2	DBJV																															
1.1.4	Erection of chain link fence / site hoarding / main gates	01/11/2013	23/11/2013	23	HouTai	■	■		■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	■								
	Site Formation																																			
1.1.5	Tendering of site formation (excavation / ground slab)	07/10/2013	26/10/2013	20	DBJV																															
1.1.6	Survey setting out - Drainage works	28/10/2013	02/11/2013	6	DBJV	■	■																													
1.1.7	Site formation (Excavation / drainage)	01/11/2013	30/11/2013	30	HouTai	■	■		■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	■	
	Temp. outdoor 11kv substation																																			
1.1.8	Tendering of site formation (outdoor 11kV substation)	07/10/2013	26/10/2013	20	DBJV																															
1.1.9	Survey setting out - outdoor 11kV substation	28/10/2013	02/11/2013	6	DBJV	■	■																													
1.1.10	Temporary outdoor substation (11kV)	04/11/2013	14/12/2013	41	Ming Fai				■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	■	
	Site Office																																			
1.1.11	Design caculation and submission for approval	25/10/2013	02/11/2013	9	KONWO	■	■																													
1.1.12	Material submission	28/10/2013	02/11/2013	6	KONWO	■	■																													
1.1.13	Site formation (foundation / concrete slab)	04/11/2013	23/11/2013	20	KONWO				■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	■								
1.1.14	Assembly of site office including ABWF, E&M, Data cabling and furnitures (DBJV)	11/11/2013	11/01/2014	62	KONWO											■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	■	
1.1.15	Assembly of site office including ABWF, E&M, Data cabling and furnitures (SOR)	11/11/2013	15/02/2014	97	KONWO											■	■	■	■	■	■		■	■	■	■	■	■		■	■	■	■	■	■	

Email
message

Environmental
Resources
Management

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Quarry Bay, Hong Kong
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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	9 December 2013

Dear Sir or Madam,

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

0212330_19November2013_1hrTSP_Station ASR1
0212330_19November2013_1hrTSP_Station ASR5

recorded on 19 November 2013.

Regards,

Mr Jovy Tam
Environmental Team Leader

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_19November2013_1hrTSP_Station ASR1** **0212330_19November2013_1hrTSP_Station ASR5** **[Total No. of Exceedances = 2]**	
Date	19 November 2013 (Measured) 26 November 2013 (Laboratory results received by ERM)	
Monitoring Station	ASR1, ASR5	
Parameter(s) with Exceedance(s)	1-hr TSP	
Action Levels	1-hr TSP (µg/m³)	ASR1 = 331 ASR5 = 340
Limit Levels	1-hr TSP (µg/m³)	500
Measured Levels	Action Level Exceedance is observed at ASR1 (363 µg/m³) during 09:33-10:33 hrs. Action Level Exceedance is observed at ASR5 (400 µg/m³) during 08:20-09:20 hrs.	
Works Undertaken (at the time of monitoring event)	On 19 November 2013, marine dredging works were carried out by one dredger Crown Asia 1 at Portion N-a. At the time of monitoring during 08:20-10:33, dredging was undertaken by one dredger. At Site WA 18, excavation and foundation for site formation were undertaken. Erection of chain link fence and site hoarding were also being carried out.	
Possible Reason for Action or Limit Level Exceedance(s)	The exceedances are unlikely to be due to the Project, in view of the following: • Whilst exceedance of Action Level was observed at ASR1, the average 1-hr TSP level (328µg/m³) at the monitoring station on 19 November 2013 was in compliance with the Action and Limit Levels. Likewise, average 1-hr TSP level at ASR5 (319µg/m³) was also in compliance with the Action and Limit Levels on 19 November 2013. The 1-hr TSP at ASR1 and ASR5 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 locations on 13th November and 25th November 2013 while no exceedance was recorded on these two days. • According to the Contractor's work activity schedule, marine dredging works at Portion N-a was the major ongoing construction works area. At Site WA 18, the level of construction works is considered to be minor and is thus not considered to induce the observed exceedance directly. • With reference to the recorded wind direction (ranged between 104° and 134°, blowing to a southeasterly direction) and wind speed (ranged from 1.18 to 1.68 m/s) during the period of observed 1-hr TSP exceedances, Stations ASR1 and ASR5 are located upstream of the major construction activities at dredging barge Crown Asia 1 at Portion N-a, thus should not be affected by the dust, if any, generated by the concerned construction activities. • As stated in the EIA report (Section 4.2.3), the background value of Tuen Mun is higher than the other region of Hong Kong, thus the exceedance 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	The Contractor was reminded to ensure all dust mitigating measures are provided at WA 18. The ET will monitor for future trends in exceedances.	
Remarks	The monitoring results, the locations of air quality monitoring stations, wind data and construction works schedule are attached.	

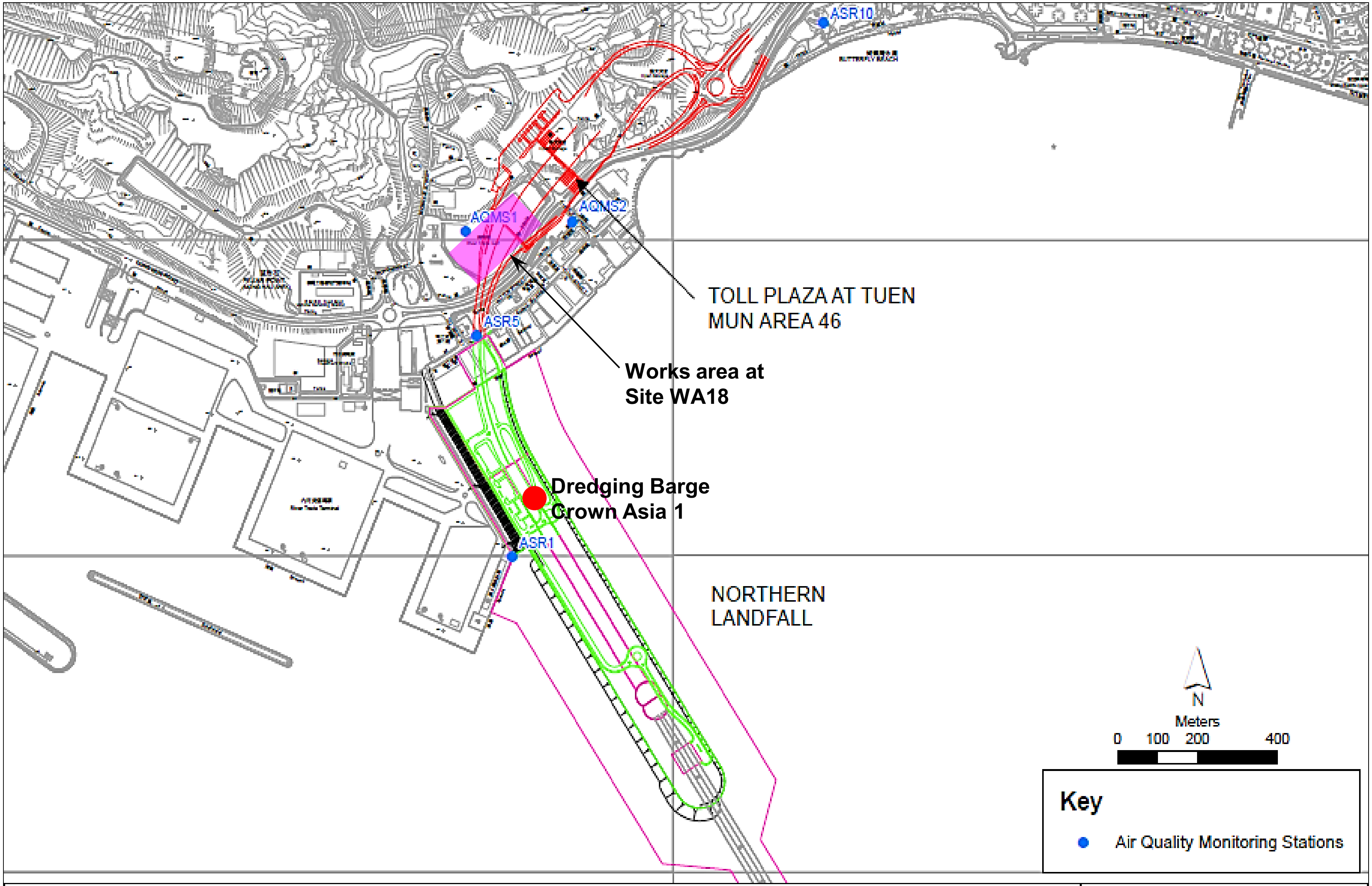

Figure 1

Indicative Construction Works Area on 19 November 2013

DATE: 06/03/2013

Environmental Resources Management

ERM

Project	Works	Date	Station	Weather	Start time (hh:mm, 24hour)	End Time (hh:mm, 24hour)	Parameters	Results	units
TMCLKL	HY/2012/08	2013-11-13	AQMS1	S	10:47	11:47	1-hour TSP	46	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	AQMS1	S	09:45	10:45	1-hour TSP	38	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	AQMS1	S	08:43	09:43	1-hour TSP	81	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR10	S	10:04	11:04	1-hour TSP	60	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR10	S	09:02	10:02	1-hour TSP	87	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR10	S	08:00	09:00	1-hour TSP	184	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	AQMS2	S	08:10	09:10	1-hour TSP	167	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	AQMS2	S	10:14	11:14	1-hour TSP	81	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	AQMS2	S	09:12	10:12	1-hour TSP	69	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR5	S	10:24	11:24	1-hour TSP	85	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR5	S	09:22	10:22	1-hour TSP	122	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR5	S	08:20	09:20	1-hour TSP	88	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR1	S	09:34	10:34	1-hour TSP	69	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR1	S	08:32	09:32	1-hour TSP	79	μg/m^3
TMCLKL	HY/2012/08	2013-11-13	ASR1	S	10:36	11:36	1-hour TSP	73	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	AQMS1	S	08:42	09:42	1-hour TSP	203	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	AQMS1	S	09:44	10:44	1-hour TSP	204	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	AQMS1	S	10:46	11:46	1-hour TSP	159	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR1	S	08:31	09:31	1-hour TSP	322	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR1	S	09:33	10:33	1-hour TSP	363	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR1	S	10:25	11:25	1-hour TSP	298	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR5	S	08:20	09:20	1-hour TSP	400	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR5	S	09:22	10:22	1-hour TSP	297	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR5	S	10:24	11:24	1-hour TSP	261	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR6	S	08:10	09:10	1-hour TSP	270	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR6	S	09:12	10:12	1-hour TSP	274	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR6	S	10:14	11:14	1-hour TSP	271	μg/m^3

TMCLKL	HY/2012/08	2013-11-19	ASR10	S	08:00	09:00	1-hour TSP	173	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR10	S	09:02	10:02	1-hour TSP	119	μg/m^3
TMCLKL	HY/2012/08	2013-11-19	ASR10	S	10:04	11:04	1-hour TSP	143	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	AQMS1	S	08:49	09:49	1-hour TSP	142	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	AQMS1	S	09:51	10:51	1-hour TSP	163	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	AQMS1	S	10:53	11:53	1-hour TSP	147	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR1	S	08:37	09:37	1-hour TSP	142	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR1	S	09:39	10:39	1-hour TSP	182	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR1	S	10:41	11:41	1-hour TSP	182	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR5	S	08:25	09:25	1-hour TSP	214	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR5	S	09:27	10:27	1-hour TSP	268	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR5	S	10:29	11:29	1-hour TSP	299	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	AQMS2	S	08:16	09:16	1-hour TSP	137	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	AQMS2	S	09:18	10:18	1-hour TSP	127	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	AQMS2	S	10:20	11:20	1-hour TSP	168	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR10	S	08:05	09:05	1-hour TSP	96	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR10	S	09:07	10:07	1-hour TSP	107	μg/m^3
TMCLKL	HY/2012/08	2013-11-25	ASR10	S	10:09	11:09	1-hour TSP	93	μg/m^3

Date: 19-Nov-2013

	Data	
Time	Average of Wind direction	Average of Wind speed
0:00	227	0.47
1:00	174	0.83
2:00	226	0.83
3:00	152	1.41
4:00	129	1.67
5:00	131	1.68
6:00	94	1.62
7:00	109	1.90
8:00	106	1.68
9:00	133	1.25
10:00	104	1.24
11:00	134	1.18
12:00	150	1.22
13:00	97	1.47
14:00	99	1.52
15:00	107	1.84
16:00	104	1.98
17:00	95	1.59
18:00	86	1.94
19:00	97	1.42
20:00	108	0.98
21:00	100	1.62
22:00	132	1.17
23:00	88	1.45
Grand Total	124	1.41

Cont. No. : HY/2012/08 - Tuen Mum - Chek Lap Kok Link Northern Connection Sub-Sea Tunnel Section

Item no.	Description	Date of start	Date of finish	Duration	Incharge	Nov																														
									Wk 46							Wk 47							Wk 48							Wk 49						
						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1
						F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
1.1.1	General site clearance	07/10/2013	12/10/2013	6	DBJV																															
	Utilities Detection																																			
1.1.2	Utilities survey / detection	15/10/2013	17/10/2013	3	APC																															
	Chain Link Fence / Hoarding																																			
1.1.3	Survey setting out - chain link fence / site hoarding / main gates	10/10/2013	11/10/2013	2	DBJV																															
1.1.4	Erection of chain link fence / site hoarding / main gates	01/11/2013	23/11/2013	23	HouTai	🟩	🟩		🟩	🟩	🟩	🟩	🟩	🟩		🟩	🟩	🟩	🟩	🟩	🟩		🟩	🟩	🟩	🟩	🟩	🟩								
	Site Formation																																			
1.1.5	Tendering of site formation (excavation / ground slab)	07/10/2013	26/10/2013	20	DBJV																															
1.1.6	Survey setting out - Drainage works	28/10/2013	02/11/2013	6	DBJV	🟫	🟫																													
1.1.7	Site formation (Excavation / drainage)	01/11/2013	30/11/2013	30	HouTai	🟧	🟧		🟧	🟧	🟧	🟧	🟧	🟧		🟧	🟧	🟧	🟧	🟧	🟧		🟧	🟧	🟧	🟧	🟧	🟧		🟧	🟧	🟧	🟧	🟧	🟧	
	Temp. outdoor 11kv substation																																			
1.1.8	Tendering of site formation (outdoor 11kV substation)	07/10/2013	26/10/2013	20	DBJV																															
1.1.9	Survey setting out - outdoor 11kV substation	28/10/2013	02/11/2013	6	DBJV	🟫	🟫																													
1.1.10	Temporary outdoor substation (11kV)	04/11/2013	14/12/2013	41	Ming Fai				🟦	🟦	🟦	🟦	🟦	🟦		🟦	🟦	🟦	🟦	🟦	🟦		🟦	🟦	🟦	🟦	🟦	🟦		🟦	🟦	🟦	🟦	🟦	🟦	
	Site Office																																			
1.1.11	Design caculation and submission for approval	25/10/2013	02/11/2013	9	KONWO	🟦	🟦																													
1.1.12	Material submission	28/10/2013	02/11/2013	6	KONWO	🟥	🟥																													
1.1.13	Site formation (foundation / concrete slab)	04/11/2013	23/11/2013	20	KONWO				🟩	🟩	🟩	🟩	🟩	🟩		🟩	🟩	🟩	🟩	🟩	🟩		🟩	🟩	🟩	🟩	🟩	🟩								
1.1.14	Assembly of site office including ABWF, E&M, Data cabling and furnitures (DBJV)	11/11/2013	11/01/2014	62	KONWO											🟦	🟦	🟦	🟦	🟦	🟦		🟦	🟦	🟦	🟦	🟦	🟦		🟦	🟦	🟦	🟦	🟦	🟦	
1.1.15	Assembly of site office including ABWF, E&M, Data cabling and furnitures (SOR)	11/11/2013	15/02/2014	97	KONWO											🟦	🟦	🟦	🟦	🟦	🟦		🟦	🟦	🟦	🟦	🟦	🟦		🟦	🟦	🟦	🟦	🟦	🟦	

Appendix M

Waste Flow Table

Name of Department: HyD **Contract No. / Works Order No.: HY/2012/08**

Monthly Summary Waste Flow Table for November 2013 [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	Actual Quantities of Inert Construction Waste Generated Monthly							
	(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	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)
Jan								
Feb								
Mar								
Apr								
May								
Jun								
Sub-total								
Jul								
Aug								
Sep	0.000	0.000	0.000	0.000	0.000	2.608	0.000	0.000
Oct	0.000	0.000	0.000	0.000	0.000	21.997	0.000	0.000
Nov	2.835	0.000	0.000	0.000	2.835	53.471	21.100	13.200
Dec								
Total	2.835	0.000	0.000	0.000	2.835	78.076	21.100	13.200

Month	Actual Quantities of Non-inert 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	recycled	generated
Jan									
Feb									
Mar									
Apr									
May									
Jun									
Sub-total									
Jul									
Aug									
Sep	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.008
Oct	0.000	0.000	0.012	0.012	0.000	0.000	0.000	0.000	0.000
Nov	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.152
Dec									
Total	0.000	0.000	0.012	0.012	0.000	0.000	0.000	0.000	0.160

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)
10.000	0.000	0.000	0.000	10.000	50.000	20.000	20.000

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 m^3. (**ER Part 8 Clause 8.8.5 (d) (ii)** refers).