
South-East Asia Japan Cable System (SJC)

Hong Kong Segment

**Environmental Impact Monitoring and Site
Audit Report**

Week 1

21 June 2012 to 24 June 2012

ATKINS

Project Title: South-East Asia Japan Cable System (SJC), Hong Kong Segment	Project No.: 4575
Document No.: 4575-OR009	Controlled Copy No.:
Document Title: Environmental Impact Monitoring and Site Audit Report (Week 1)	
Covering Letter/Transmittal Ref. No.: 4575//OC461/SH/EY/twc	Date of Issue: 27 June 2012

Revision, Review and Approval Records

		/	/	/
		/	/	/
		/	/	/
00	Environmental Impact Monitoring and Site Audit Report (Week 1)	Various/ 27 June 12	Endi Yung/ 27 June 12	Susana Halliday/ 27 June 12
Revision	Description	Prepared by / date	Reviewed by / date	Approved by / date

Distribution (if insufficient space, please use separate paper)

Controlled Copy No.	Issued to
1	WEN
2-4	EPD
5	IEC
6	ACL

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EXECUTIVE SUMMARY

The site preparation works for the SJC cable network system commenced on 21 June 2012. Atkins China Limited (ACL) has been appointed as the Environmental Team (ET) to undertake environmental management and monitoring work in accordance with the EM&A Manual.

This is the first weekly Environmental Impact Monitoring and Site Audit Report for the works specified in the Environmental Permit (EP-423/2011/A) and Environmental Monitoring and Audit (EM&A) Manual. This report summarises the findings and results of the EM&A during the reporting period of the first week of works and covers the reporting period 21 to 24 June 2012.

Environmental Monitoring and Audit Progress

The EM&A programme has been undertaken in accordance with the approved EM&A Manual. A summary of the monitoring activities performed in the reporting period is summarised below:

- Weekly site environmental inspection with Independent Environmental Checker (IEC) was conducted on 22 June 2012

No marine works were during the reporting period. Therefore, no water quality monitoring and marine mammal inspection was conducted during reporting period.

Exceedance of Action and Limit Levels

No exceedance of action and limit level was recorded during the reporting period.

Complaint Log

No complaints were received in relation to environmental impact during the reporting period.

Site Inspection and Audit

Site inspections for shore based works with IEC were carried out on 22 June 2012 as appropriate. No non-compliances were recorded for the reporting period. A summary of findings conducted during the monitoring period is provided below.

22 June 2012

No environmental observation was found during the site inspection. The contractor was reminded to pay particular attention during fuel/chemical handling to avoid contamination.

1. INTRODUCTION

1.1 Background of the Project

- 1.1.1 South-East Asia Japan Cable System (SJC) is a submarine cable system linking South-East Asia to Japan. SJC will provide direct access and diverse routing between Singapore, the Philippines, Hong Kong, China, Brunei and Japan. The cable system will span approx. 8,900km and will be mainly composed of a seven-fibre pair high capacity submarine cable system with a design capacity of 17.9 terabits per second. The project will increase the broadband capacity of Hong Kong.
- 1.1.2 The Project is classified as a Designated Project under Item C12 of Part I Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO): “A *dredging operation which is (a) less than 500 metres from the nearest boundary of an existing or planned (iii) bathing beach; and (vii) coastal protection area*”.
- 1.1.3 In accordance with the EIAO, an environmental assessment was undertaken and a Project Profile was submitted to the Environmental Protection Department (EPD) (PP-444/2011) for an Application for Permission to Apply Directly for Environmental Permit for the project (Application No. DIR-213/2011) (DIR). The DIR was granted by EPD on 1st August 2011 with conditions.
- 1.1.4 Atkins China Limited (ACL) has been appointed as the Environmental Team (ET) to undertake environmental management and monitoring work in accordance with the EM&A Manual.
- 1.1.5 This is the first Weekly Environmental Impact Monitoring and Site Audit Report for the works specified in the Environmental Monitoring and Audit (EM&A) Manual. This report summarises the results and findings of the EM&A during the reporting period 21 to 24 June 2012.

1.2 Summary of Impact EM&A Requirements

- 1.2.1 The EM&A programme requires environmental monitoring for water quality, marine mammals and construction and demolition waste management, as specified in the EM&A Manual. This shall be conducted accordingly.

1.3 Works Undertaken

- 1.3.1 Site preparation works commenced on 22 June 2012 and involved minor excavation of a trench from beach manhole to allow cable laying.

2. MONITORING RESULTS

2.1 Water Quality

Programme

2.1.1 No marine works were during the reporting period. Therefore, no water quality monitoring was conducted during reporting period.

Monitoring Stations

2.1.2 Seventeen water quality monitoring stations were sampled during the impact water quality monitoring (see Figure 2-1) and listed in Table 2-1 as follows. These stations are applicable for works undertaken during installation of the cable.

Table 2-1 – Impact Water Quality Monitoring stations

Monitoring Station	Co-ordinates		Station Purpose
A1	839451	808265	180m from point A
A2	839511	808265	120m from point A
A3	839571	808265	60m from point A
A4	839691	808265	60m from point A
A5	839751	808265	120m from point A
A6	839811	808265	180m from point A
B1	839408	808160	180m from point B
B2	839468	808160	120m from point B
B3	839528	808160	60m from point B
B4	839648	808160	60m from point B
B5	839708	808160	120m from point B
B6	839768	808160	180m from point B
C	840081	808353	Control Station
D1	839429	808641	100m from point D
D2	839540	808552	100m from point D
D3	839453	808443	100m from point D
D4	839344	808531	100m from point D

Methodology

2.1.3 Water quality monitoring was conducted in accordance with the methodology described in the EM&A Manual.

2.1.4 The water quality parameters monitored included dissolved oxygen (DO) (% saturation and mg/L), temperature, turbidity (NTU), salinity and suspended solids (SS). DO, temperature, turbidity and salinity were measured *in-situ* whereas SS was determined by laboratory analysis.

2.1.5 Laboratory analysis of SS was carried out at ALS Laboratory Group, a recognised HOKLAS accredited laboratory.

Results

2.1.6 No marine works were during the reporting period. Therefore, no water quality monitoring and marine mammal inspection was conducted during reporting period.

2.2 Marine Mammals

2.2.1 No marine works were during the reporting period. Therefore, no marine mammal inspection was conducted during reporting period..

2.3 Construction and Demolition Waste Management

2.3.1 Weekly environmental site inspection with IEC was undertaken on 22 June 2012.

3. ENVIRONMENTAL NON-COMPLIANCE AND COMPLAINTS

3.1 Environmental Exceedances

Water Quality

3.1.1 No marine works were during the reporting period. Therefore, no water quality monitoring was conducted during reporting period.

3.2 Site Inspections

3.2.1 Site inspections for shore based works were carried out on 22 June 2012 as appropriate. No non-compliances were recorded for the reporting period. A summary of findings conducted during the monitoring period is provided in Table 3-1.

Table 3-1 – Summary of Environmental Site Inspections

Date of Inspection	Observation	Action
22 June 2012	Nil.	No environmental observation was found during the site inspection. The contractor was reminded to pay particular attention during fuel/chemical handling to avoid contamination.

Photo 1: Site preparation works commenced on 22 June 2012 and involved minor excavation of a trench from beach manhole to allow cable laying.



3.3 Environmental Complaint

3.3.1 No complaints were received in relation to environmental impact during the reporting period.

4. FORECAST AND SCHEDULE

4.1 Key Engineering Works for the Coming Week

- Prepare cable laying by injection jetting accordingly; and
- Completion of shore works including backfilling of trench.

4.2 Monitoring Schedule for the Coming Week

Water Quality Monitoring

4.2.1 The water quality monitoring schedule for the coming week is provided in Table 4-1 below.

Table 4-1 – Water Quality Monitoring Programme

Date	Day	Sampling Time	
		Mid-Flood	Mid-Ebb
28 June 2012	Thursday	~ 11:37-15:07	~ 5:26-8:56
30 June 2012	Saturday	~ 14:26-17:56	~ 7:32-11:02

Marine Mammal Inspection

4.2.2 Marine mammal inspections shall be carried out during cable installation by injection jetting works.

5. CONCLUSION

- 5.1.1 This is the first weekly Environmental Impact Monitoring and Site Audit Report prepared by Atkins China Limited (ACL), for the consultancy services for the south-East Asia Japan Cable System (SJC) Project. This report been prepared in compliance with the Environmental Permit (EP-423 / 2011 /A) and associated EM&A Manual, and covers the reporting period 21 to 24 June 2012.
- 5.1.2 No marine works were during the reporting period. Therefore, no water quality monitoring was conducted during reporting period.
- 5.1.3 Site inspection with IEC was carried out as appropriate with no non-compliances recorded for the reporting period. During site inspection on 21 June 2012, no environmental observation was recorded and the Contractor was reminded to pay particular attention during fuel/chemical handling to avoid contamination.
- 5.1.4 Overall, environmental impacts arising from the project activities have been controlled and properly rectified.

Figures

