

EAST RAIL EXTENSIONS
SHEUNG SHUI TO LOK MA CHAU SPUR LINE

Environmental Committee

Minutes of Meeting No. 14 held at 10:00am
on Wednesday, 19 Dec 2007,
at Fo Tan Railway House, Room 330

Present:		
Ms. Karen Barretto	Friends of the Earth (Hong Kong)	Member (NGO)
Mr. Michael Kilburn	The Hong Kong Bird Watching Society	Member (NGO)
Mr. Paul Leader	Ecological Consultant	Member (consultant)
Mr. Richard Kwan	Manager - Environmental (HK Projects)	Member (MTR) (Chairman)
In Attendance:		
Dr. Chan Kam-foon	Manager - Environmental Engineering	Member (MTR)
Mr. Clarence Tze	Senior Environmental Specialist	Member (MTR)
Mr. Peter Choi	Environmental Specialist	Member (MTR)
Ms. Catherine Leung	Environmental Engineer	Member (MTR)
Absent with apology:		
Dr. Ng Cho-nam	The University of Hong Kong	Member (NGO)
Dr. Lew Young	WWF Hong Kong	Member (NGO)
Dr. Michael Leven	Ecological Consultant	Member (consultant)

	<u>Action By</u>
<p>1. <u>Chairman</u> welcomed Members and introduced <u>Dr. Chan</u>, Environmental Engineering Manager of MTR Operations Division.</p> <p>Item 1 - <u>Confirmation of minutes of Meeting No. 14 of the Environmental Committee</u></p> <p>2. The minutes of Meeting No. 14 was confirmed without further comments.</p>	
<p>Item 2 - <u>Progress of Spur Line Project</u></p> <p>3. <u>Chairman</u> explained the arrangement of LMC wetland business after the merger of Corporation. The merger took place officially on 2nd December 2007. For smooth transition upon the merger, Richard Kwan and Clarence Tze will continue to be the contact points for the Environmental Committee.</p> <p>4. <u>Chairman</u> informed that the post merged KCRC would continue to hold the “mother” Environmental Permits (EP) whereas the merged MTRC would apply for the Further EP’s for the operations of the railway lines. Hence, both post merged KCRC and merged MTRC will be held responsible for the EP conditions including the operation and maintenance of the LMC wetlands.</p> <p>5. <u>A Member (NGO)</u> requested for commitment of the Corporation that the funding for long-term operation and maintenance of the LMC wetlands has been secured. <u>Chairman</u> replied that the concerned budget has been reserved in the coming three years rolling budget plan and would seek the consent from senior management and reply to the Members.</p> <p>6. <u>A Member (NGO)</u> enquired about the management works for the two PTI fishponds. <u>A Member (MTR)</u> replied</p>	MTR

	<u>Action By</u>
<p>that AFCD has taken up the management and maintenance work for the two fishponds with funding from HyD. HyD's letter of confirmation for funding was included in the last meeting minutes. <i>Chairman</i> further informed that the LMC PTI, station access road with the associated mitigation measures were all handed over to HyD and HyD had also applied for a Further EP for its operations.</p> <p>7. <i>A Member (NGO)</i> further asked whether the LMC HCMP includes the PTI fishponds. <i>A Member (consultant)</i> explained that the PTI fishponds are the additional area under the EP and therefore are included in the current HCMP. However, monitoring and management works are to be carried out by AFCD for which the results are being included as appendix into the LMC monitoring reports.</p>	
<p>Item 3 - <u>Ecological Enhancement Works and Monitoring – an Update on Management Works and Look Ahead</u></p> <p>8. <i>A Member (consultant)</i> reported the ecological monitoring results and the management works undertaken in 2007 (details in Annex A) with the well functioning of the wetland and infrastructure works. Operational stage monitoring of 26 target bird species was commenced on 1st January 2006.</p> <p>9. <i>A Member (NGO)</i> advised that a member of the Bird Watching Society saw a dead bird onto a window of the LMC station, which was likely happened at night time due to lights from station. <i>Chairman</i> replied that this incident has been discussed including measures to prevent the collision such as placing stickers of bird feature. However, since the bird collision was happened at night time and has only been one isolated incident, the staff will pay attention and continue to monitor if there will be other occurrences. <i>A Member (NGO)</i> requested for a photo at night time looking towards the station from wetland. MTR will provide and welcomes any suggestions from Members</p>	

	<u>Action By</u>
should this incident repeat.	
<p>Item 4 - <u>Any Other Business</u></p> <p>8. <u>Chairman</u> reported that a sick bird (Grey Heron) was found at LMC wetland early December. AFCD collected the bird for testing and confirmed H5N1 positive on 13 December 2007. As precautionary measure, all public visits including non-essential activities are suspended.</p>	
<p>Item 5 - <u>Date of Next Meeting</u></p> <p>9. The date of next meeting to be advised in the future.</p>	

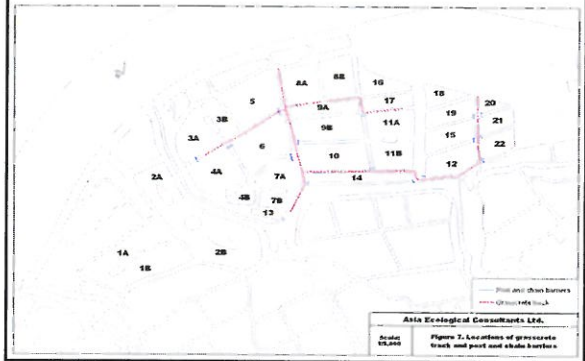
Version 0
3 Jan 2008

**Lok Ma Chau Spur Line
14th Environmental Committee Meeting
19th December 2007**

**Report on Ecological Monitoring
& Management & Works
Programme 2007**

Asia Ecological Consultants Limited

Tracks and barriers - installation completed in October 2007



Chain and post barriers installed to limit access and reduce disturbance



Dry season water management – levels dropped to expose islands



Dry season water management – levels dropped to create shallows



Dry season water management – drain down schedule

Period No.	Date (commencement of drain down)	Comments
3	1 st October 2007	Drain to expose island
9	8 th October 2007	Lower by 1 m only
4	8 th October 2007	Drain to c. 50 cm water depth
6	22 nd October 2007	Drain completely
3	5 th November 2007	Drain completely
10	19 th November 2007	Drain completely
11	3 rd December 2007	Drain completely
9	17 th December 2007	Drain completely
5	7 th January 2008	Drain completely
7	21 st January 2008	Drain completely
8	11 th February 2008	Drain completely

Dry season water management – uPVC pipes to control levels



Routine vegetation management – dry season schedule

Date	Ponds
October 2007	15, 19, 20, 21, 22
November 2007	13, 14, 16, 17 18
December 2007	15, 19, 20, 21, 22
January 2008	13, 14, 16, 17 18
February 2008	15, 19, 20, 21, 22
March 2008	13, 14, 16, 17 18

Vegetation Management – grass encroachment



Vegetation Management – grass weeding to encourage wetland plants



Vegetation Management – control of mikania



Vegetation Management – control of mikania



Vegetation Management - results



Vegetation Management - results



Control of Apple Snails - on site protocol

- Partial drain down so that about 50% of the pond bottom is shallow water (this should be undertaken over a period of about four days);
- Hand removal of all adult and large juvenile Apple Snails until most have been removed;
- Off-site disposal of all snails collected;
- Hand removal of all egg masses (these can be placed in standing water or pushed into wet mud to destroy them);
- Full drain-down of the pond with final check for Apple Snails and further removal as required;
- Refilling with fish-free water from Pond 12.

Control of Apple Snails - egg masses



Control of Apple Snails - removal of adults



Control of Apple Snails - vegetation cutting to facilitate removal of adults



Control of Apple Snails - adults



Control of Apple Snails - wetland vegetation survival



Control of Apple Snails - use of bait to attract duck



Trash fish stocking - early dry season

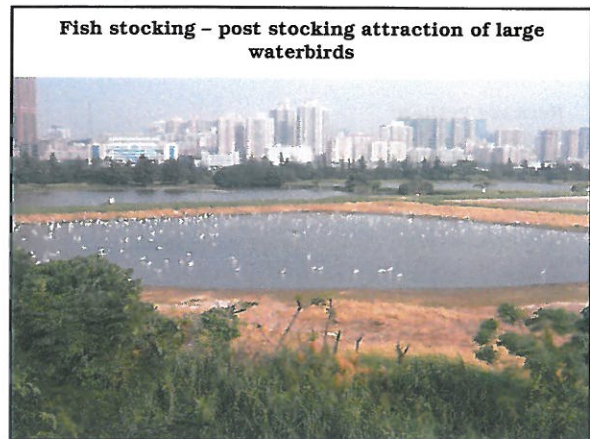
Pond No.	Date of stocking	Quantity
6	Tuesday, 6 th November 2007	1,000 kg
6	Tuesday, 13 th November 2007	500 kg
6	Tuesday, 20 th November 2007	1,000 kg
6	Tuesday, 27 th November 2007	500 kg
6	Tuesday, 4 th December 2007	1,000 kg
6	Tuesday, 11 th December 2007	1,000 kg
6	Tuesday, 18 th December 2007	1,000 kg
6	Tuesday, 8 th January 2008	1,000 kg
6	Tuesday, 15 th January 2008	1,000 kg
6	Tuesday, 22 nd January 2008	1,000 kg
6	Tuesday, 29 th January 2008	1,000 kg
6	Tuesday 5 th February 2008	1,000 kg

Fish stocking - trash fish



Fish stocking - measuring and weighing trash fish





Operational Stage Monitoring

- Required as off August 2007 when Spurline commenced operation (although operational stage monitoring started in January 2006)
- Wildlife targets extended to cover species of conservation importance detailed in the Environmental Impact Assessment:
 - Eurasian Otter
 - 26 bird species (c.f. Table 2.3 of the HCMP)
 - Burmese Python, Chinese Soft-shelled Turtle, Chinese Bullfrog
 - Dragonflies (increased numbers and species diversity)

Monitoring of Target Waterbird Species: protocol

- Counts from towers at LMC at Mai Po San Tsuen (MPST) for larger waterbirds and raptors.
- Transect survey for smaller target species at LMC and MPST and for all species at San Tin.
- Some species being counted by both methods to see which is most effective.
- Methodology for calculation of targets reviewed in early 2007 (included in latest HCMP)

Eurasian Otter – 2007

Recorded from Camera traps:

- During week ending 27 April 2007
- Adult and juvenile during week ending 21st September

Bird Targets 12 months up to December 2007

Density (meas/ha)	LMC	Control Areas	Ratio	Density (meas/ha)	LMC	Control Areas	Ratio
Great Cormorant	2.338	0.271	10.08	Greater Painted-stripe	0.023	0.000	LMC
Grey Heron	2.298	0.158	14.51	Black-winged Stilt (tower)	0.140	0.024	5.83
Great Egret	0.852	0.571	1.49	Black-winged Stilt (transect)	0.152		6.27
Little Egret	0.903	0.892	1.01	Pintail/Swanhoe's Snipe	0.004	0.002	1.57
Japanese Pond Heron	0.137	0.137	1.00	Common Snipe	0.198	0.021	9.38
Black-faced Spoonbill	0.381	0.046	8.33	Richard's Pipit	0.066	0.041	1.58
Common Teal (tower)	0.972		38.15	Blue-throat	0.003	0.000	LMC
Common Teal (transect)	1.178	0.025	46.23	Common Stonechat	0.104	0.029	3.56
Greater Spotted Eagle	0.025	0.000	LMC	Pallas's Grasshopper Warbler	0.027	0.001	28.14
Imperial Eagle	0.001	0.000	LMC	Zitting Cuckoo	0.153	0.159	2.01
Eurasian Hobbit	0.031	0.000	LMC	Japanese Yellow Bunting	0.000	0.000	nr
Japanese Quail	0.000	0.000	nr	Red-bellied Starling	2.450	0.831	2.95
Eurasian Coot (tower)	0.000	0.000	LMC	Black-naped Oriole	0.012	0.001	8.32
Eurasian Coot (transect)	0.001	0.000	LMC				
P. t. Jacana (tower)	0.006		24.74				
P. t. Jacana (transect)	0.005		24.74				

Key:
 - Not recorded within WCA or Control Areas during the period
 - Target met (i.e. density in WCA at least twice that in Control Areas)
 - Target not met, although density higher than in Control Areas
 - Target not met and density lower than in Control Areas

Herpetofauna - 2007

Burmese Python:

No records yet during 2007 (sporadic sightings in previous years).

Chinese Soft-shelled Turtle:

Singles on 13th and 19th March 2007 (usually 5-10 sightings per year, mainly during wet season).

Chinese Bullfrog

One recorded in August

Dragonflies - 2007

Number of species recorded:

	adults	exuviae
LMC	22	13
ST	16	2
MPST	15	1

Recent interesting records

- Bird list now 227 (recent additions include Common Reed Bunting and Black Stork)
- Up to 200 Black-faced Spoonbills
- Max 552 Common Teal
- Up to 66 Common Snipe
- Four different Greater Spotted Eagles

Endangered - Birds 2007

Monthly Peak Counts of Endangered Species Recorded at Lok Ma Chau in 2007

Name	Status	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Black-birded Spoonbill	Endangered	100	120	134	32		3				80	200
Lesser White-fronted Goose	Vulnerable	2	2	2								
Falcated Duck	Near Threatened	4									2	
Greater Spotted Eagle	Vulnerable	2	1	4								2
Imperial Eagle	Vulnerable	3	1									1
Black-billed Godwit	Near Threatened				1							1
Macleayan Reed Warbler	Vulnerable										1	1
Yellow-browed Bunting	Near Threatened				2	2				1	1	5

