

Response to Comments (EPD's comments on 9 March 2012)

Section	Comments	Response
Section 2.1 General Requirements	The following clauses should be included in the Plan: <u>Section 2.1 General Requirements:</u> “AFCD should be informed of the start date of excavation.” The estimated period of excavation should be mentioned under this section for the sake of clarity.	Noted and revised. Please refer to Section 2.1.
Table 4.1 Alarm Level	The following clauses should be included in the Plan: <u>Table 4.1 Alarm:</u> The proponent is suggested to “implement the mitigation measures as soon as possible / once agreed” under scenario when Alarm Level is triggered..	Noted and revised. Please refer to Table 4.1..

MTR Corporation Limited

HONG KONG SECTION OF GUANGZHOU –
SHENZHEN – HONG KONG EXPRESS RAIL LINK
(No. EP-349/2009/E)

Groundwater Drawdown Contingency Plan
for Shek Kong Stabling Sidings and
Emergency Rescue Siding
(Contract 823B) (Revision 1) – Addendum Pages

Verified by:



Position:

Independent Environmental Checker

Date:

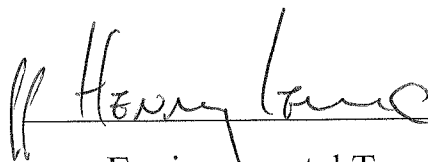
16 March 2012

MTR Corporation Limited

HONG KONG SECTION OF GUANGZHOU –
SHENZHEN – HONG KONG EXPRESS RAIL LINK
(No. EP-349/2009/E)

Groundwater Drawdown Contingency Plan
for Shek Kong Stabling Sidings and
Emergency Rescue Siding
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Certified by:



Position:

Environmental Team Leader

Date:

19 MAR 2012



MAEDA – CHINA STATE JOINT VENTURE

GROUNDWATER DRAWDOWN CONTINGENCY PLAN

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(n) Underground utilities outside buildings.

A hydrogeological impact assessment had been carried out during EIA study to identify and assess the potential impact of the tunnel works on the surface water and groundwater and its major concern is the potential drawdown in any soil and aquifer layers.

2.1 General Requirements

- All necessary actions shall be taken that the works will not adversely affect the utilities in the close proximity of the site;
- Prior to the commencement of construction works, base readings of all monitoring instruments shall be established and agreed with MTRCL. A set of initial readings of all monitoring instruments shall be submitted to MTRCL for record purpose;
- During the construction works, the piezometers and standpipe shall be monitored daily or more frequently as required by MTRCL;
- Whenever a significant difference between successive readings is observed / recorded, MTRCL will be informed;
- AFCD should be informed of the start date of excavation and the cut & cover tunnel excavation period will be commenced from Apr 2012 to Mar 2012; and
- A complete set of monitoring records including plots of readings versus time shall be continuously updated and kept on site and available for inspection upon request by MTRCL / Local Authority;

MCJV shall be responsible for the maintenance of the monitoring points during the construction works. Any damaged instruments shall be repaired / reinstated or replaced as directed by MTRCL or his representative on site.

2.2 Project Organisation

The Organisation for environmental management depicting the functional inter-relationship of personnel is shown in the **Appendix 1**. The purpose of this being to clearly indicate the managerial control, the reporting structure and the interface relationship between all parties involved in the groundwater drawdown issue.

Company	Contact Person	Title / Address	Tel. No.	Fax No.
MCJV	Mr. Austen Hankinson	Project Director	2498-2033	2498-0021
	Mr. Gary Lo	Deputy Project Manager	2498-2033	2498-0021
	Mr. Jackey Kong	Deputy Project Manager	2498-2033	2498-0021
	Mr. S. Miyanomae	Senior Engineer	2498-2033	2498-0021
	Mr. Yip Chai Hon	Supervisor	2498-2033	2498-0021
	Mr. Erwin Regalado	QA & Environmental Manager	2498-2033	2498-0021
	Ms. Wendy Ng	Environmental Officer	2498-2033	2498-0021
Regional Office (North), EPD	Mr. Jack Kan Mr. Alan Yim	10/F, Sha Tin Government Offices, 1 Sheung Wo Che Road, Sha Tin, N.T.	2158-5823 2158-5851	2650-6033 2650-6033



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GROUNDWATER DRAWDOWN CONTINGENCY PLAN

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	- Investigate any physical impact on existing building structure; - Increase the frequency of monitoring; - Propose mitigation measures for MTRCL to consider if necessary; - Implement the mitigation measures once agreed	MCJV MCJV MCJV & MTRCL MCJV
Alarm Level	- Notify MTRCL and MTRCL will inform AFCD if the level of drawdown is valid; - Review any abnormal readings on other instrumentation monitoring points by MCJV; - Investigate any physical impact on existing building structure; - Carry out comprehensive condition survey and assessment; - Cease the work adjacent any existing building structure under significant influence if considered necessary or once ordered by MTRCL; - Propose mitigation measures for MTRCL to consider; - Implement the mitigation measures as soon as possible or once agreed	MCJV & MTRCL MCJV MCJV MCJV MCJV MCJV & MTRCL MCJV

4.1 Monitoring and Reporting Team

The Deputy Project Manager (DPM) will be the key contact person in relation to groundwater issues during tunnelling works. The Environmental Officer (EO) will be responsible to oversee that the Site Engineer (SE) implement the monitoring programme and check the compliance with the project's environmental requirements during construction.

4.2 Mitigation Measures

As per Section 6 and 7 of the updated HIA report, the following measures need to implement in order to minimize the drawdown effects to the groundwater table:

- Toe grouting should be applied beneath the toe level of the temporary / permanent cofferdam walls as necessary to lengthen the effective flow path of groundwater from outside and thus control the amount of water inflow to the excavation
- Recharge wells should be installed as necessary outside the excavation areas and water pumped from the excavation areas should be recharge back into the ground
- Subsequent to the completion of diaphragm wall construction and toe grouting and prior to the commencement of excavation work, full scale



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pumping test will be undertaken to verify the water cut-off effectiveness and effects of dewatering on adjacent structures.

Details and operation procedures of recharge wells and monitoring frequency please refer to method statement of pumping test (823B-CSF-CS-000577).

END OF TEXT