Table K1 Cumulative Statistics on Exceedances

Parameters	Level of Exceedance	Total No. recorded in this reporting month	Total No. recorded since project commencement
1-hr TSP	Action	3	73
	Limit	0	5
24-hr TSP	Action	0	8
	Limit	0	4
Water Quality	Action	0	20
	Limit	0	1
Impact Dolphin	Action	0	11
Monitoring	Limit	0	13

Table K2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period		Cumulative Statistics	
_	Complaints	Notifications of	Successful
		Summons	Prosecutions
This Reporting Month (October 2018)	0	0	0
Total No. received since project commencement	16	1	0

Email message **Environmental** Resources Management

To Ramboll Hong Kong, Limited (ENPO)

2507, 25/F One Harbourfront 18 Tak Fung Street Hunghom, Kowloon

Hong Kong

From ERM- Hong Kong, Limited

Telephone: (852) 2271 3000 Facsimile: (852) 2723 5660

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 18 October 2018



Dear Sir or Madam,

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

0212330_4October2018_1hrTSP_Station ASR1

One Action Level Exceedance was recorded on 4 October 2018.

Regards,

Dr Jasmine Ng

Environmental Team Leader

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ERM-Hong Kong, Limited



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

Air Quality Impact Monitoring Notification of Exceedance

Log No.	0212330_4October2018_1hrTSP_Station ASR1				
	[Total No. of Exceedances = 1]				
Date	4 October 2018 (Measured)				
	18 October	2018 (Laboratory results received by ERM)			
Monitoring Station	A	SR1, ASR5, ASR6, ASR10 and AQMS1			
Parameter(s) with		1-hr TSP			
Exceedance(s)		1-111 151			
Action Levels	24-hr TSP (μ g/m ³)	ASR1 = 213			
		ASR5 = 238			
		AQMS1 = 213			
		ASR6 = 238			
		ASR10 = 214			
	1-hr TSP (μg/m³)	ASR1 = 331			
		ASR5 = 340			
		AQMS1 = 335			
		ASR6 = 338			
		ASR10 = 337			
Limit Levels	1-hr TSP (μg/m³)	500			
	24-hr TSP (μg/m³)	260			
Measured Levels	Action Level Exceedance for 1-h	r TSP is observed at ASR1 (340 μg/m3) during 1411 - 1511 hrs.			
Works Undertaken (at	On 4 October 2018, TBM tunnel	works were carried out on site.			
the time of monitoring					
event)					
Possible Reason for	The exceedance is unlikely to be	due to the Project, in view of the following:			
Action or Limit Level	 According to the construction 	ction information provided by the Contractor, TBM tunnel works			
Exceedance(s)	were carried out on site. No ground construction works were carried out.				
	The exceedance is unlikely to be due to the project as dust suppression measures were				
	implemented properly on site. Water spraying was applied on site to prevent dust. Water				
	spraying record is provid				
	1 1 0 1	nces are unlikely to be due to the project.			

Actions Taken/To Be	According to the construction information provided by the Contractor, no ground construction				
Taken	works were carried out on 4 October 2018. Dust suppression measures were properly				
	implemented. Water spraying was applied to prevent dust. Dusty materials were covered by				
	tarpaulin sheet. Photos are provided in Annex A. Photos taken during AQM are also provided in				
	Annex A. No significant dust impact was observed at ASR1. Based on the above, no additional				
	action is required.				
	The Contractor has been reminded to implement the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual including watering to maintain all exposed road surfaces and dust sources wet, use of sprinklers for water spraying, covering the materials having the potential to create dust by clean tarpaulin, use of water truck and watering on all exposed soil within the Project site) throughout the construction period.				
Remarks	The monitoring results and the locations of air quality monitoring stations are attached.				

TMCLKL	HY/2012/08	4/10/2018	AQMS1	Sunny	14:22	1-hour TSP	121	ug/m3
TMCLKL	HY/2012/08	4/10/2018	AQMS1	Sunny	15:24	1-hour TSP	111	ug/m3
TMCLKL	HY/2012/08	4/10/2018	AQMS1	Sunny	16:26	1-hour TSP	61	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR1	Sunny	14:11	1-hour TSP	340	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR1	Sunny	15:13	1-hour TSP	267	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR1	Sunny	16:15	1-hour TSP	76	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR10	Sunny	13:35	1-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR10	Sunny	14:37	1-hour TSP	78	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR10	Sunny	15:39	1-hour TSP	56	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR5	Sunny	13:58	1-hour TSP	228	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR5	Sunny	15:00	1-hour TSP	210	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR5	Sunny	16:02	1-hour TSP	94	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR6	Sunny	13:47	1-hour TSP	183	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR6	Sunny	14:49	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR6	Sunny	15:51	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	4/10/2018	AQMS1	Sunny	17:28	24-hour TSP	65	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR1	Sunny	17:17	24-hour TSP	125	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR10	Sunny	16:41	24-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR5	Sunny	17:04	24-hour TSP	137	ug/m3
TMCLKL	HY/2012/08	4/10/2018	ASR6	Sunny	16:53	24-hour TSP	112	ug/m3

	Meteor	ological Data for Impact Monitoring in	the reporting period
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)
18/10/04	0:00	0.9	100
18/10/04	1:00	0.4	79
18/10/04	2:00	0.4	98
18/10/04	3:00	0.9	343
18/10/04	4:00	1.3	342
18/10/04	5:00	0.4	340
18/10/04	6:00	1.3	313
18/10/04	7:00	1.3	308
18/10/04	8:00	1.3	319
18/10/04	9:00	1.8	348
18/10/04	10:00	1.8	14
18/10/04	11:00	1.8	341
18/10/04	12:00	1.8	315
18/10/04	13:00	1.8	330
18/10/04	14:00	2.2	283
18/10/04	15:00	2.2	302
18/10/04	16:00	2.2	302
18/10/04	17:00	2.2	281
18/10/04	18:00	1.3	318
18/10/04	19:00	1.8	310
18/10/04	20:00	0.9	306
18/10/04	21:00	0.9	317
18/10/04	22:00	1.3	320
18/10/04	23:00	0.9	311



Annex A Photos provided by the Contractor

*Note: Photos taken on 4/10/2018



Water spraying was applied frequently on site. (Works Area Portion N-A)



Dusty material was covered by tarpaulin sheet. (Works Area Portion N-C)



Annex A Photos taken during AQM

*Note: Photos taken on 4/10/2018



ASR1



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

Weekly Water Spraying Record 每週灑水檢查記錄

Site	Site Location 地盤位置:Northern Landfall							
Dat	te 日期	:	01	-/0 2018	to 至	07-10	2018	
	<u>Time</u> 時間	Monday <u>星期一</u>	Tuesday 星期二	Wednesday 星期三	Thursday 星期四	<u>Friday</u> 星期五	Saturday 星期六	Sunday 星期日
1	8:00 - 8:45		V,		1	V	V	V
2	8:45 – 9:30	1/		V				
3	9:30 - 10:15							V
4	10:15 - 11:00				/			
5	11:00 – 11:45				V			
6	11:45 – 12:30			1				
7	12:30 – 13:15	~						
8	13:15 – 14:00					./		
9	14:00 – 14:45							
10	14:45 – 15:30					1		1
11	15:30 – 16:45		V			4	3/	V
12	16:45 – 17:30			1			V	/
	Verified by Site Foreman 地盤科文簽署確認	-	T	7	7	7	7	7
Nial	rht shift 友思工作 /if nocossary 和家町)							

Night shift 夜間工作	(if necessary 如需要)			
17:30 - 19:00				
19:00 – 20:30				
20:30 - 22:00				
22:00 – 23:00				

*Please - tick ($\sqrt{}$) in the box if complete the spraying of water. circle (O) in the box if it is raining.

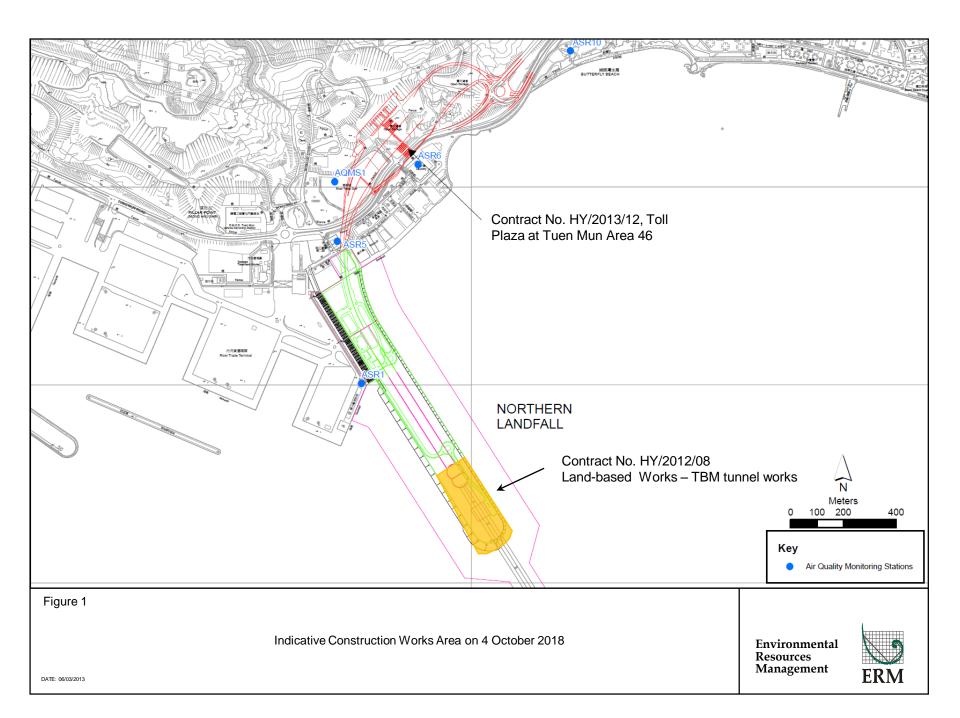
*如果 - 已經完成灑水,請於方格內加上剔號(√)。 是下雨天, 請於方格內加上圓圈(O)。

Remarks:

- (1) Pursuant to EP Clause 3.15, the Permit Holder shall undertake watering at least 12 times per day on all exposed soil within the Project site and associated work areas in Tuen Mun area throughout the construction phase.
- (2) Spraying position includes the main haul road, open area, slopes, stockpiles and any other dusty materials.
- (3) If it is raining, no water spraying is needed.
- (4) The no of spraying will be increased due to site condition.

備註:

- (1) 根據環境許可證 3.15 條例,在整個施工階段內,許可證持有人須每天至少 12 次在屯門區項目工地和相關的工作區域內的所有暴露土壤灑水。
- (2) 灑水位置包括主要運輸道路,空曠地帶,斜坡,存料堆,以及任何其他產生塵埃物料。
- (3) 當下雨時,地盤將不需要灑水。
- (4) 如果地盤情況更改或有需要時、灑水次數會相應增加。



Email message

Environmental Resources Management

To Ramboll Hong Kong, Limited (ENPO)

2507, 25/F One Harbourfront 18 Tak Fung Street Hunghom, Kowloon

Hunghom, Kowle Hong Kong

From ERM- Hong Kong, Limited

Telephone: (852) 2271 3000 Facsimile: (852) 2723 5660

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 24 October 2018



Dear Sir or Madam,

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

0212330_10October2018_1hrTSP_Station ASR1

One Action Level Exceedance was recorded on 10 October 2018.

Regards,

Dr Jasmine Ng

Environmental Team Leader

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ERM-Hong Kong, Limited



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

Air Quality Impact Monitoring Notification of Exceedance

Log No.	0212330_10October2018_1hrTSP_Station ASR1				
	[Total No. of Exceedances = 1]				
Date	10 October 2018 (Measured)				
	23 Octob	er 2018 (Laboratory results received by ERM)			
Monitoring Station	A	SR1, ASR5, ASR6, ASR10 and AQMS1			
Parameter(s) with Exceedance(s)		1-hr TSP			
Action Levels	24-hr TSP (μg/m³)	ASR1 = 213			
	=1 11 101 (µg/ 111)	ASR5 = 238			
		AQMS1 = 213			
		ASR6 = 238			
		ASR10 = 214			
	1-hr TSP (μg/m³)	ASR1 = 331			
	(, 0,)	ASR5 = 340			
		AQMS1 = 335			
		ASR6 = 338			
		ASR10 = 337			
Limit Levels	1-hr TSP (μg/m³)	500			
	24-hr TSP (μg/m³)	260			
Measured Levels	Action Level Exceedance for 1-h	r TSP is observed at ASR1 (451 μ g/m3) during 1338 – 1438 hrs.			
Works Undertaken (at	On 10 October 2018, TBM tunnel	l works were carried out on site.			
the time of monitoring					
event)					
Possible Reason for	The exceedance is unlikely to be	due to the Project, in view of the following:			
Action or Limit Level	According to the construction	ction information provided by the Contractor, TBM tunnel works			
Exceedance(s)	were carried out on site. No ground construction works were carried out.				
	The exceedance is unlikely to be due to the project as dust suppression measures were				
	implemented properly on site. Water spraying was applied on site to prevent dust. Water				
	spraying record is provid	led in Annex A.			
	Based on the above, the exceeda	nces are unlikely to be due to the project.			

Actions Taken/To Be	According to the construction information provided by the Contractor, no ground construction
Taken	works were carried out on 10 October 2018. Water spraying was applied to prevent dust. Photos taken during AQM were provided in Annex A. No significant dust impact was observed at ASR1. Site inspection was carried out on 10 October 2018 and ASR1 was also inspected. Dust suppression measures were properly implemented during the site inspections and no significant dust impact was observed at ASR1. Photos are provided in Annex A. Based on the above, no additional action is required.
	The Contractor has been reminded to implement the required mitigation measures as per the EP, approved EIA and Updated EM&A Manual including watering to maintain all exposed road surfaces and dust sources wet, use of sprinklers for water spraying, covering the materials having the potential to create dust by clean tarpaulin, use of water truck and watering on all exposed soil within the Project site) throughout the construction period.
Remarks	The monitoring results, wind data and the locations of air quality monitoring stations are attached.

TMCLKL	HY/2012/08	10/10/2018	AQMS1	Sunny	13:50	1-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	10/10/2018	AQMS1	Sunny	14:52	1-hour TSP	79	ug/m3
TMCLKL	HY/2012/08	10/10/2018	AQMS1	Sunny	15:54	1-hour TSP	70	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR1	Sunny	13:38	1-hour TSP	451	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR1	Sunny	14:40	1-hour TSP	77	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR1	Sunny	15:42	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR10	Sunny	13:04	1-hour TSP	103	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR10	Sunny	14:06	1-hour TSP	106	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR10	Sunny	15:08	1-hour TSP	98	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR5	Sunny	13:26	1-hour TSP	297	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR5	Sunny	14:28	1-hour TSP	213	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR5	Sunny	15:30	1-hour TSP	156	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR6	Sunny	13:15	1-hour TSP	176	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR6	Sunny	14:17	1-hour TSP	171	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR6	Sunny	15:19	1-hour TSP	126	ug/m3
TMCLKL	HY/2012/08	10/10/2018	AQMS1	Sunny	16:56	24-hour TSP	47	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR1	Sunny	16:44	24-hour TSP	75	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR10	Sunny	16:10	24-hour TSP	47	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR5	Sunny	16:32	24-hour TSP	114	ug/m3
TMCLKL	HY/2012/08	10/10/2018	ASR6	Sunny	16:21	24-hour TSP	71	ug/m3

	Meteorological Data for Impact Monitoring in the reporting period					
Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)			
18/10/10	0:00	1.8	120			
18/10/10	1:00	0.9	81			
18/10/10	2:00	0.4	77			
18/10/10	3:00	0	-			
18/10/10	4:00	0.9	328			
18/10/10	5:00	0.4	339			
18/10/10	6:00	0.4	327			
18/10/10	7:00	0.4	335			
18/10/10	8:00	0	-			
18/10/10	9:00	0.9	115			
18/10/10	10:00	2.2	123			
18/10/10	11:00	2.2	132			
18/10/10	12:00	2.2	303			
18/10/10	13:00	2.7	318			
18/10/10	14:00	4.5	343			
18/10/10	15:00	4.5	330			
18/10/10	16:00	0.9	288			
18/10/10	17:00	0.4	293			
18/10/10	18:00	0.9	314			
18/10/10	19:00	0.9	184			
18/10/10	20:00	0.4	183			
18/10/10	21:00	1.8	39			
18/10/10	22:00	1.3	35			
18/10/10	23:00	0.9	345			



Annex A Photos taken during site inspection

*Note: Photos taken on 10/10/2018



Water spraying was applied frequently on site. (Works Area Portion N-A)



Sprinklers were installed to water the main haul road. (Works Area Portion N-A)



Annex A Photos taken during AQM inspection

*Note: Photos taken on 10/10/2018



ASR1



ASR1



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

Weekly Water Spraying Record 每週灉水檢查記錄

Site	e Location 地盤	位置:	Northern Landfall								
Date 日期:			08-10 2018 to 至 14-10 2018								
	<u>Time</u> 時間	Monday 星期一	Tuesday 星期二	Wednesday <u>星期三</u>	Thursday 星期四	<u>Friday</u> 星期五	Saturday 星期六	Sunday 星期日			
1	8:00 – 8:45	1/	0/			J,	1,	V			
2	8:45 – 9:30		V			\/	V				
3	9:30 – 10:15				1/	1		1/			
4	10:15 - 11:00	1/	V.				1	1/			
5	11:00 – 11:45			1				1/			
6	11:45 – 12:30		/			1		- 1/			
7	12:30 – 13:15		/,				/				
8	13:15 – 14:00		V,			$\sqrt{}$					
9	14:00 – 14:45		√_	/	1		1/	V			
10	14:45 – 15:30	1/	/		1	1	1/	/			
11	15:30 – 16:45		1		1		V	V			
12	16:45 – 17:30					1		/			
	Verified by Site Foreman 地盤科文簽署確認	T	-			1		7			
Night shift 夜間工作 (if necessary 如需要)											

Nig	Night shift 夜間工作 (if necessary 如需要)								
	17:30 - 19:00								
	19:00 – 20:30								
	20:30 - 22:00								
	22:00 – 23:00								

*Please - tick ($\sqrt{}$) in the box if complete the spraying of water. circle (O) in the box if it is raining.

*如果 - 已經完成灑水,請於方格內加上剔號(√)。 是下雨天, 請於方格內加上圓圈(O)。

Remarks:

- (1) Pursuant to EP Clause 3.15, the Permit Holder shall undertake watering at least 12 times per day on all exposed soil within the Project site and associated work areas in Tuen Mun area throughout the construction phase.
- (2) Spraying position includes the main haul road, open area, slopes, stockpiles and any other dusty materials.
- (3) If it is raining, no water spraying is needed.
- (4) The no of spraying will be increased due to site condition.

備註:

- (1) 根據環境許可證 3.15 條例,在整個施工階段內,許可證持有人須每天至少 12 次在屯門區項目工地和相關的工作區域內的所有暴露土壤灑水。
- (2) 灑水位置包括主要運輸道路,空曠地帶,斜坡,存料堆,以及任何其他產生塵埃物料。
- (3) 當下雨時,地盤將不需要灑水。
- (4) 如果地盤情況更改或有需要時,灑水次數會相應增加。

