

Appendix 3-11

Sensitivity Test on Cumulative Construction Phase TSP, RSP and FSP Levels with the “Yau Mei Site” Project

Appendix 3-11 Cumulative Impacts Due to Concurrent Construction with Approved “Yau Mei Site” Project

1 Introduction

The planned “Yau Mei Site” project’s EIA report was recently approved. Air quality impact due to Site formation works of that project has been assessed in its EIA report. Given to the fact that the concerned “Yau Mei Site” project is distant away from this Project with a shortest separation distance over 360m between the site boundary of this Project and planned “Yau Mei Site” project boundary, construction of that project is unlikely to result in any adverse impacts. There is currently no existing ASRs between the two project sites. Air quality impact of that Project will be controlled through the implementation of mitigation measures committed for that project under its EIA study.

Nevertheless, this sensitivity test has been undertaken in order to evaluate potential cumulative impacts due to concurrent construction of these two projects. Air quality impact due to construction works of the planned “Yau Mei Site” project has been extracted from the approved EIA report of that project. Cumulative air pollutants levels have also been calculated accordingly.

2 Construction Programme and Construction Sequence of Planned “Yau Mei Site” Project

Construction programme of the planned “Yau Mei Site” project is presented in **Appendix 3-1A** of this EIA report. According to its construction programme, the site formation works of that project would be carried out between December 2015 and April 2017. In which, the peak site formation works would be carried out between December 2015 and November 2016 (i.e. a period of 12 months where most of the filling and excavation activities are involved).

For the purpose of this sensitivity test, a conservative approach has been adopted by assuming that the peak site formation works of “Yau Mei Site” project would be carried out concurrently with the site formation works of this Project in order to assess the cumulative impact (i.e. a worst case scenario).

3 Assessment Methodology

3.1 Emission Sources

Based on information in the approved EIA Report for planned “Yau Mei Site” project, the site formation works of residential area (Phases B to D) has been identified as the dust emission sources of that project, which was modelled as area sources. Currently, planned “Yau Mei Site” is a green field site and is covered by grass. During the construction phase, construction works will be carried out in phases and the grass land at the unaffected area will be maintained so that the soil underneath is not exposed to the atmosphere (i.e. there will be no wind erosion).

According to the information obtained, each of the Phases B, C, and D works area will be divided into 7 sub-zones (i.e. a total of 21 sub-zones as shown in the phasing plan below). Within each Phase, only one sub-zone will be under construction in any one time in order to avoid cumulative impacts. Thus, construction works within the active sub-zone will be the only emission source since the remaining areas of the Project Site is covered by grass and will not be affected (i.e. no dust emission for the remaining areas). Once construction for a sub-zone is completed, the works area will be compacted, covered by tarpaulin sheet and hydroseeded before construction of another zone. Watering will also be applied on regular basis. Thus, there will be no cumulative construction impacts.

Information such as emission factors, construction sequence and locations, etc. under its mitigated scenario were directly extracted from the approved EIA report of “Yau Mei Site” project which are also attached with this document (Please refer to **Annex 1** for the extracted information).

As discussed above, peak site formation period of “Yau Mei Site” project has been used in the assessment in order to represent a worst case scenario. Thus, for short-term (hourly and daily) and long-term impact (annual), it has been based on the peak site formation period between December and November (i.e. a period of 12 months) where most of the filling and excavation materials are involved during site formation stage.

3.2 Emission Strength

Emission factors due to construction of the “Yau Mei Site” project were directly extracted from its approved EIA report, which is also shown in **Annex 1**.

3.3 Assessment Approach

In the approved “Yau Mei Site” project EIA report, the same set of ASRs that may be affected by both projects, were identified and assessed (the locations of ASRs assessed in the approved “Yau Mei Site” project are shown in **Annex 2**). The predicted TSP, RSP and FSP concentrations due to construction of the “Yau Mei Site” project were extracted and presented in **Annex 2**.

The TSP, RSP and FSP concentrations at the same ASR locations due to this EIA Project was also predicted and presented in **Appendices 3-6** and **3-7** of this EIA report.

Then, cumulative TSP, RSP and FSP concentrations due to concurrent construction of the two projects (i.e. “Yau Mei Site” project and this EIA Project), are calculated and the results are presented in **Annex 3**.

4 Assessment Results and Conclusion

According to the sensitivity test results as shown in the summary table in **Annex 3**, the cumulative dust emissions due to concurrent construction of the concerned two project sites would not adversely impact on ASRs as the contribution due to the “Yau Mei Site” Project is very small and insignificant given to the fact that the concerned planned “Yau Mei Site” project is far away from this Project Site.

The calculated cumulative dust levels can also comply with the relevant air quality objectives/criteria. As such, there will be no adverse cumulative impact during construction stage.

Annex 1
(in Appendix 3-11)

*Information of Construction Sequence and Emission Factors of
Planned “Yau Mei Site” project
(Directly Extracted from the Approved “Yau Mei Site” EIA Report)*

Annex 1 Details of Phasing Construction During Site Formation Stage of the Approved “Yau Mei Site” Project

Based on information in the approved EIA Report for planned “Yau Mei Site” project, the site formation works of residential area (Phases B to D) has been identified as the dust emission sources of that project, which was modelled as area sources. Its construction programme was also shown in Appendix 3-1A of this report for reference.

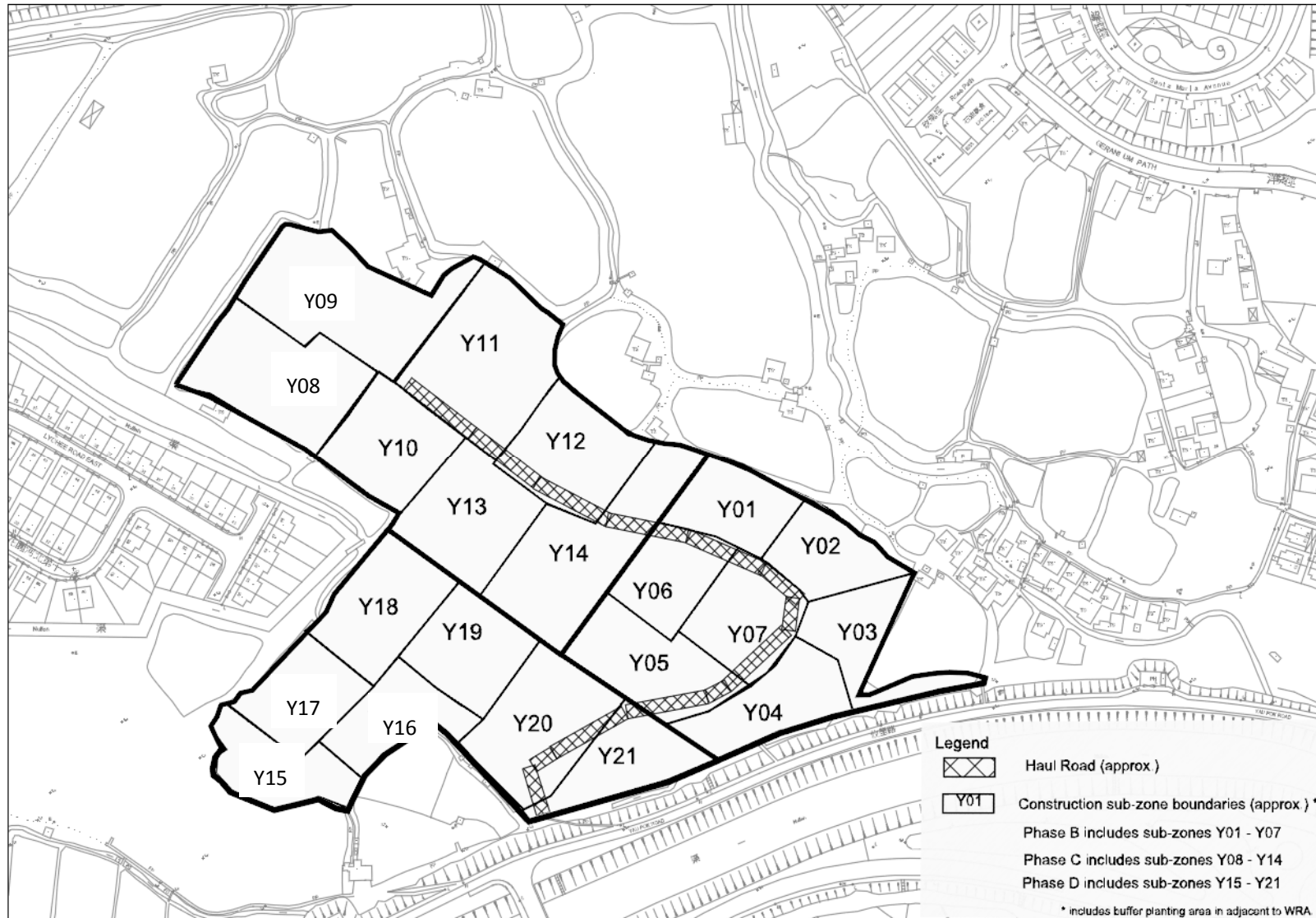
Currently, planned “Yau Mei Site” is a green field site and is covered by grass. During the construction phase, construction works will be carried out in phases and the grass land at the unaffected area will be maintained so that the soil underneath is not exposed to the atmosphere (i.e. there will be no wind erosion).

According to the information obtained, each of the Phases B, C, and D works area will be divided into 7 sub-zones (i.e. a total of 21 sub-zones as shown in the phasing plan below). Within each Phase, only one sub-zone will be under construction in any one time in order to avoid cumulative impacts. Thus, construction works within the active sub-zone will be the only emission source since the remaining areas of the Project Site is covered by grass and will not be affected (i.e. no dust emission for the remaining areas). Once construction for a sub-zone is completed, the works area will be compacted, covered by tarpaulin sheet and hydroseeded before construction of another zone. Watering will also be applied on regular basis. Thus, there will be no cumulative construction impacts.

Information such as emission factors, construction sequence and locations, etc. under its mitigated scenario were directly extracted from the approved EIA report of “Yau Mei Site” project which are also attached with this document.

For short-term (hourly and daily) and long-term impact (annual), it has been based on the peak site formation period between December and November of next year (i.e. 12 months) where most of the filling and excavation materials are involved during site formation stage (i.e. source of emission) to represent a worst case scenario.

Indicative Phasing Plan During Site Formation Stage of the Residential Area of Approved “Yau Mei Site” Project



***Calculated Emission Factors for TSP of "Yau Mei Site"
Project***

***Directly Extracted from Appendix 3-2 on the Approved EIA
Report of the "Yau Mei Site" Project (AEIAR-189/2015)***

**Calculation of Emission Factors During
Filling/ Excavation Works**

Appendix 3-2A Summary Table of Calculated TSP Emissions Modeling Input Data During Filling/ excavation Works (Unmitigated Scenario)

For both the unmitigated scenario and mitigated scenarios, since there will be no construction activities during restricted hours, and on Sundays and general holidays, the calculated emission rates have been applied to day-time hours during general weekdays only (i.e. 0800 to 1800 hours). While from 1800 to 0800 hours during general workdays, and on Sunday and general holidays (whole day) are adopted for impact assessment of wind erosion on the site.

Cut and Cover (day-time only)

Project Site	Ref. ID	X coordiante	Y coordinate	Elevation, m	Release Height, m	Unmitigated *	
						Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	B1	823791.7	837839.3	2	0	2.32E-04	0
Yau Mei	C1	823674.3	837936.5	2	0	2.32E-04	0
Yau Mei	C2	823611.3	837992.5	2	0	2.32E-04	0
Yau Mei	D1	823556.8	837822.6	2	0	2.32E-04	0
Yau Mei	D2	823530.8	837837.1	2	0	2.32E-04	0

Wind Erosion

Project Site	Ref. ID	X coordiante	Y coordinate	Elevation, m	Release Height, m	Night-time only *		Day-time only *
						Emission rate, g/m ² /s	Int. Vert. Dim.	
Yau Mei	B1	823791.7	837839.3	2	0	2.70E-06	0	2.70E-06
Yau Mei	C1	823674.3	837936.5	2	0	2.70E-06	0	2.70E-06
Yau Mei	C2	823611.3	837992.5	2	0	2.70E-06	0	2.70E-06
Yau Mei	D1	823556.8	837822.6	2	0	2.70E-06	0	2.70E-06
Yau Mei	D2	823530.8	837837.1	2	0	2.70E-06	0	2.70E-06

Travelling on Haul Road (unpaved) (day-time only)

Project Site	Road Segment ID	X coordiante	Y coordinate	Ground mPD level, m	X Length, m	Y Length, m	Emission Height, m	Angle, degree	Unmitigated *			Int. Vert. Dim.
									Calculated emission rate, g/m/s	Total emission, g/s	Emission rate, g/m ² /s	
									A	= (A*B)	= (A*B) / (B*C)	
Yau Mei	HR34	823606.25	837783.42	2	21	6	0.5	-107	1.68E-03	3.52E-02	2.79E-04	0
Yau Mei	HR35	823600.55	837800.67	2	10	6	0.5	-31	1.68E-03	1.68E-02	2.79E-04	0
Yau Mei	HR36	823609.29	837806.18	2	35	6	0.5	-29	1.68E-03	5.86E-02	2.79E-04	0
Yau Mei	HR37	823639.8	837823.3	2	35	6	0.5	-11	1.68E-03	5.86E-02	2.79E-04	0
Yau Mei	HR38	823674.9	837829.9	2	10	6	0.5	-27	1.68E-03	1.68E-02	2.79E-04	0
Yau Mei	HR39	823684.2	837835.1	2	35	6	0.5	-43	1.68E-03	5.86E-02	2.79E-04	0
Yau Mei	HR40	823711.5	837860.7	2	14	6	0.5	-83	1.68E-03	2.35E-02	2.79E-04	0
Yau Mei	HR41	823715.49	837876.74	2	21	6	0.5	-141	1.68E-03	3.52E-02	2.79E-04	0
Yau Mei	HR42	823699.06	837890.03	2	35	6	0.5	-157	1.68E-03	5.86E-02	2.79E-04	0
Yau Mei	HR43	823665.74	837904.45	2	35	6	0.5	-169	1.68E-03	5.86E-02	2.79E-04	0
Yau Mei	HR44	823632.84	837910.8	2	35	6	0.5	-152	1.68E-03	5.86E-02	2.79E-04	0
Yau Mei	HR45	823602.58	837926.84	2	35	6	0.5	-143	1.68E-03	5.86E-02	2.79E-04	0
Yau Mei	HR46	823574.8	837948.13	2	20	6	0.5	-143	1.68E-03	3.35E-02	2.79E-04	0

Remark: * Please refer to Appendix 3-2C for the calculation of emission factors.

**Directly Extracted from Appendix 3-2 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-2B Summary Table of Calculated TSP Emissions Modeling Input Data During Filling/excavation Works (Mitigated Scenario)

For both the unmitigated scenario and mitigated scenarios, since there will be no construction activities during restricted hours, and on Sundays and general holidays, the calculated emission rates have been applied to day-time hours during general weekdays only (i.e. 0800 to 1800 hours). While from 1800 to 0800 hours during general workdays, and on Sunday and general holidays (whole day) are adopted for impact assessment of wind erosion on the site.

Cut and Cover (day-time only)

Project Site	Ref. ID	X coordiante	Y coordinate	Elevation,m	Release Height, m	Mitigated *	
						Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	Y01	823716	837918	2	0	2.32E-05	0
Yau Mei	Y02	823762.638	837885.693	2	0	2.32E-05	0
Yau Mei	Y03	823791.862	837841.201	2	0	2.32E-05	0
Yau Mei	Y04	823736.167	837827.063	2	0	2.32E-05	0
Yau Mei	Y05	823630.998	837877.023	2	0	2.32E-05	0
Yau Mei	Y06	823631	837877	2	0	2.32E-05	0
Yau Mei	Y07	823661.372	837860.749	2	0	2.32E-05	0
Yau Mei	Y08	823577.758	838018.797	2	0	2.32E-05	0
Yau Mei	Y09	823471.666	838003.9	2	0	2.32E-05	0
Yau Mei	Y10	823509.885	837938.972	2	0	2.32E-05	0
Yau Mei	Y11	823610.592	837970.06	2	0	2.32E-05	0
Yau Mei	Y12	823652.24	837942.697	2	0	2.32E-05	0
Yau Mei	Y13	823604.809	837915.329	2	0	2.32E-05	0
Yau Mei	Y14	823576.077	837875.705	2	0	2.32E-05	0
Yau Mei	Y15	823505.176	837857.374	2	0	2.32E-05	0
Yau Mei	Y16	823473.021	837825.291	2	0	2.32E-05	0
Yau Mei	Y17	823525.379	837798.17	2	0	2.32E-05	0
Yau Mei	Y18	823540.631	837900.732	2	0	2.32E-05	0
Yau Mei	Y19	823577.386	837822.631	2	0	2.32E-05	0
Yau Mei	Y20	823638.814	837832.11	2	0	2.32E-05	0
Yau Mei	Y21	823594.362	837784.138	2	0	2.32E-05	0

Wind Erosion

Project Site	Ref. ID	X coordiante	Y coordinate	Elevation,m	Release Height, m	Night-time only *		Day-time only *	
						Emission rate, g/m ² /s	Int. Vert. Dim.	Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	Y01	823716	837918	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y02	823762.638	837885.693	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y03	823791.862	837841.201	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y04	823736.167	837827.063	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y05	823630.998	837877.023	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y06	823631	837877	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y07	823661.372	837860.749	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y08	823577.758	838018.797	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y09	823471.666	838003.9	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y10	823509.885	837938.972	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y11	823610.592	837970.06	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y12	823652.24	837942.697	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y13	823604.809	837915.329	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y14	823576.077	837875.705	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y15	823505.176	837857.374	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y16	823473.021	837825.291	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y17	823525.379	837798.17	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y18	823540.631	837900.732	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y19	823577.386	837822.631	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y20	823638.814	837832.11	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y21	823594.362	837784.138	2	0	2.70E-06	0	2.70E-07	0

Inputs to the ISCST Model:

Calculated Emission Rate *		Emission Rate Factor **
General Workdays	Day-time (A) 2.32E-05	0.11640 =B/A
	Night-time (B) 2.70E-06	

Remark: * Please refer to Appendices 3-2C for the calculation of emission factors.

** For general workdays, in order to simulate calculated emission rate due to wind erosion during nighttime period, the "Emission Rate Factor" is applied from 1800 to 0800 hours in the ISCST model. Similarly, for Sundays and Holidays, the calculated emission rate due to wind erosion during day-time period is simulated by adopting the "Emission Rate Factor" from 0800 to 1800 hours in the ISCST model.

Directly Extracted from Appendix 3-2 of the Approved EIA Report of the "Yau Mei Site" Project (AEIAR-189/2015)

Travelling on Haul Road (paved) (day-time only)

Project Site	Road Segment ID	X coordiante	Y coordinate	Ground mPD level, m	X Length, m	Y Length, m	Emission Height, m	Angle, degree	Mitigated *			Int. Vert. Dim.	
									Calculated emission rate, g/m/s	Total emission, g/s	Emission rate, g/m ² /s		
					B	C			D	= (D*B)	=(D*B)/(B*C)		
Yau Mei	HR34	823606.25	837783.42	2	21		6	0.5	-107	1.68E-04	3.52E-03	2.79E-05	0
Yau Mei	HR35	823600.55	837800.67	2	10		6	0.5	-31	1.68E-04	1.68E-03	2.79E-05	0
Yau Mei	HR36	823609.29	837806.18	2	35		6	0.5	-29	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR37	823639.8	837823.3	2	35		6	0.5	-11	1.68E-04	5.86E-03	2.79E-05	0
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Yau Mei	HR39	823684.2	837835.1	2	35		6	0.5	-43	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR40	823711.5	837860.7	2	14		6	0.5	-83	1.68E-04	2.35E-03	2.79E-05	0
Yau Mei	HR41	823715.49	837876.74	2	21		6	0.5	-141	1.68E-04	3.52E-03	2.79E-05	0
Yau Mei	HR42	823699.06	837890.03	2	35		6	0.5	-157	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR43	823665.74	837904.45	2	35		6	0.5	-169	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR44	823632.84	837910.8	2	35		6	0.5	-152	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR45	823602.58	837926.84	2	35		6	0.5	-143	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR46	823574.8	837948.13	2	20		6	0.5	-143	1.68E-04	3.35E-03	2.79E-05	0

Remark: * Please refer to Appendix 3-2C for the calculation of emission factors.

**Directly Extracted from Appendix 3-2 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-2C Calculation of TSP Emission Rates of the Project Site During Filling/Excavation Works (Both Unmitigated and Mitigated Scenarios)

Type of Work	Type of Emission Source	Parameter	Value	Remark
Wind Erosion on Exposed Ground	(1) Wind Erosion (day-time)	TSP emission factor (Mg/hectare/year)	0.85	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed.
		Emission rate, g/m²/s (unmitigated)	2.70E-06	$= \{(0.85 \times 1000000) / 10000\text{m}^2 / (365 \times 24 \times 60 \times 60)\}$
		% of dust suppression [#]	90.0%	for watering 8 times per day [#]
		Emission rate, g/m²/s (mitigated)	2.70E-07	
	(1) Wind Erosion (night-time)	TSP emission factor (Mg/hectare/year)	0.85	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed.
		Emission rate, g/m²/s (unmitigated)	2.70E-06	$= \{(0.85 \times 1000000) / 10000\text{m}^2 / (365 \times 24 \times 60 \times 60)\}$
Cut and Cover Activities	(2) Bulldozing & Surface Compacting (day-time only)	Eqn.: $E = 2.6 (s)^{1.2} / (M)^{1.3}$		USEPA AP-42, S11.9, Table 11.9-2, 7/98 ed. *
		Material moisture content (%), M	2.2	To represent the worst case scenario, the lowest moisture content within the range specified for overburden in the USEPA AP-42, S11.9, Table 11.9-3, 7/98 ed., is adopted
		Material silt content (%), s	15.1	To represent the worst case scenario, the highest silt content within the range specified for overburden in the USEPA AP-42, S11.9, Table 11.9-3, 7/98 ed., is adopted
		Calculated Emission Factor (kg/hr), E	2.42E+01	
		Site Area (m ²), A ***	44000	-
		Calculated emission rate (unmitigated) (g/m²/s)	1.53E-04	$= (E \times 1000) / A / (60 \times 60)$
		% of dust suppression [#]	90.0%	for watering 8 times per day [#]
		Calculated emission rate, g/m²/s (mitigated)	1.53E-05	Due to % of dust suppression.
	(3) Removal/ unloading soil materials by excavators (day-time only)	Emission Factor of excavator unloading topsoil (kg/Mg), E1	0.02	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed. (scraper unloading topsoil is adopted). *
		Topsoil removal by excavator (kg/Mg), E2	0.029	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed. (Topsoil removal by scraper is adopted). *
		Total Emission by excavator (kg/Mg), E = E1+E2	4.90E-02	
		Total quantity of materials involved (m ³), Q	277500	The total amount of concerned excavated materials and imported fill materials as provided by Engineer
No. of months for site formation (Phase B to D), m		11	Total duration of "excavation and filling works" of concerned site formation works.	
No. of working days per month, d		25	From Project Engineer	
No. of working hours per day, h		10	From Project Engineer (working hours = 0800 hr to 1800 hr)	
Average hourly output (m ³ /hr), O1		100.91	$= Q / (m \times d \times h)$	
Average hourly output (Mg/hr), O2		252.27	$= O1 \times 2.5\text{Mg/m}^3$. Assuming the truck capacity of 6m ³ and 15 tons (i.e. soil density of 2.5 Mg/m ³).	
Site Area (m ²), A ***		44000	-	
Calculated emission rate (unmitigated) (g/m²/s)	7.80E-05	$= (O2 \times (E \times 1000) / A) / (60 \times 60)$		
% of dust suppression [#]	90.0%	for watering 8 times per day [#]		
Calculated emission rate (mitigated) (g/m²/s)	7.80E-06			

**Directly Extracted from Appendix 3-2 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Type of Work	Type of Emission Source	Parameter		Remark		
	(4) Earth Handling/ Loading, Unloading, and stockpiling (day-time only)	Eqn.: $E = k \times (0.0016) \times ((U/2.2)^{1.3} / (M/2)^{1.4})$		USEPA AP-42, S13.2.4, 11/06 ed. *		
		Particle size multiplier, k	0.74	USEPA AP-42, S13.2.4, 11/06 ed.		
		Mean wind speed (m/s), U	1.85	Based on year 2010 average wind speed recorded at Wetland Park Station of Hong Kong Observatory.		
		Material moisture content (%), M	2.2	Pls. refer to Works Item no. 2 above		
		Calculated Emission Factor (kg/Mg), E	0.00083	$E = k \times (0.0016) \times ((U/2.2)^{1.3} / (M/2)^{1.4})$		
		Total quantity of materials involved (m ³), Q	277500	The total amount of concerned excavated materials and imported fill materials as provided by Engineer		
		No. of months for site formation, m	11	Total duration of "excavation and filling works" of concerned site formation works.		
		No. of working days per month, d	25	From Project Engineer		
		No. of working hours per day, h	10	From Project Engineer (working hours = 0800 hr to 1800 hr)		
		Average hourly output (m ³ /hr), O1	100.91	$= Q/(m \cdot d \cdot h)$		
		Average hourly output (Mg/hr), O2	252.27	$= O1 \times 2.5 \text{ Mg/m}^3$. Assuming the truck capacity of 6m3 and 15 tons (i.e. soil density of 2.5 Mg/m3).		
		Site Area (m ²), A ***	44000	-		
		Calculated emission rate (unmitigated) (g/m ² /s)	1.32E-06	$= (O2 \times (E \times 1000) / A) / (60 \cdot 60)$		
		% of dust suppression #	90.0%	for watering 8 times per day #		
		Calculated emission rate (mitigated) (g/m ² /s)	1.32E-07			
		Total Emission for "Cut and Cover" (= (2) + (3) + (4))	Total Emission rate, g/m²/s (Unmitigated) (day-time only)	2.32E-04	Calculated total emission factor for "Cut and Cover".	
			Total Emission rate, g/m²/s (mitigated) (day-time only)	2.32E-05	Calculated total emission factor for "Cut and Cover" ##.	
		Vehicle movement on Haul Road	(5) Paved Haul Road (day-time only)	Eqn.: $E = k \times (sL)^{0.91} \times (W)^{1.02}$		USEPA AP-42, S13.2.1, 11/06 ed.
				Particle size multiplier (g/VKT), k	3.23	USEPA AP-42, S13.2.1, 11/06 ed., Table 13.2.1-1 for PM-30.
				Road surface silt loading (g/m ²), sL	14	To represent the worst case scenario, the highest silt loading within the range of typical values specified for quarry operation in the USEPA AP-42, S13.2.1, 11/06 ed., Table 13.2.1-3, is adopted. **
				Mean vehicle weight (tons), W	16	The average weight of the empty truck and full load truck.
Calculated Emission Factor (g/VKT), E1	603.09			$E = k \times (sL)^{0.91} \times (W)^{1.02}$		
Calculated emission factor (g/v-m), E2	0.603			$= E1/1000$		
Average no. of trucks (veh./hr), T	10			Estimated maximum no. of trucks per hour from Engineer		
Calculated emission rate (unmitigated), g/m/s	1.68E-03			$= E2 \cdot (T/60 \cdot 60)$		
% of dust suppression #	90.0%			for watering 8 times per day #		
Calculated emission rate (mitigated), g/m/s	1.68E-04					

Remark:

Please refer to Appendix 3-9 for calculation of dust suppression efficiency.

Due to the phased construction area, only limited space and construction plants will be available for construction in any one time. Thus, the construction activities under the "Cut and Cover" category that would contribute to dust emissions will unlikely to operate at the same time. In fact, only one of the above activities will operate in any one time. However, to be conservative, air quality impacts due to simultaneous construction of these activities has been taken into account in the assessment.

* The equation recommended for concerned particular construction activity as per Section 13.2.3 of USEPA AP-42 regarding heavy construction operation.

** The concerned construction activity of this Project during site formation stage will involve earth movement activities and transportation of excavated/ fill materials, etc. The nature of these activities is similar to that of quarry operation. Thus, the typical silt loading within the range of typical values from quarry site, as stipulated in USEPA AP-42, Table 13.2.1-3, S13.2.1, 11/06 ed., is adopted in the above equation. The reported highest silt loading value has been used in this exercise for worst case scenario. It is noted that similar assumption has also been adopted for paved construction haul road in the approved EIA report, Appendix F of the "EIA-032/1999 - East Rail Extension Hung Hom to Tsim Sha Tsui - Environmental Impact Assessment".

*** Total site area of Phases B to D as well as buffer planting area along its edge in adjacent to the WRA, is taken as 4.4ha.

Calculated Emission Factors for TSP of "Yau Mei Site" Project

Directly Extracted from Appendix 3-2 on the Approved EIA Report of the "Yau Mei Site" Project (AEIAR-189/2015)

**Calculation of Emission Factors During
Removal of Surcharge**

**Directly Extracted from Appendix 3-2 of the Approved EIA Report
of the “Yau Mei Site” Project (AEIAR-189/2015)**

Appendix 3-2D Summary Table of Calculated TSP Emissions Modeling Input Data During Removal of Surcharge (Unmitigated Scenario)

For both the unmitigated scenario and mitigated scenarios, since there will be no construction activities during restricted hours, and on Sundays and general holidays, the calculated emission rates have been applied to day-time hours during general weekdays only (i.e. 0800 to 1800 hours). While from 1800 to 0800 hours during general workdays, and on Sunday and general holidays (whole day) are adopted for impact assessment of wind erosion on the site.

Cut and Cover (day-time only)

Project Site	Ref. ID	X coordiante	Y coordinate	Elevation, m	Release Height, m	Unmitigated *	
						Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	B1	823791.7	837839.3	2	0	2.26E-04	0
Yau Mei	C1	823674.3	837936.5	2	0	2.26E-04	0
Yau Mei	C2	823611.3	837992.5	2	0	2.26E-04	0
Yau Mei	D1	823556.8	837822.6	2	0	2.26E-04	0
Yau Mei	D2	823530.8	837837.1	2	0	2.26E-04	0

Wind Erosion

Project Site	Ref. ID	X coordiante	Y coordinate	Elevation, m	Release Height, m	Night-time only *		Day-time only *
						Emission rate, g/m ² /s	Int. Vert. Dim.	
Yau Mei	B1	823791.7	837839.3	2	0	2.70E-06	0	2.70E-06
Yau Mei	C1	823674.3	837936.5	2	0	2.70E-06	0	2.70E-06
Yau Mei	C2	823611.3	837992.5	2	0	2.70E-06	0	2.70E-06
Yau Mei	D1	823556.8	837822.6	2	0	2.70E-06	0	2.70E-06
Yau Mei	D2	823530.8	837837.1	2	0	2.70E-06	0	2.70E-06

Travelling on Haul Road (unpaved) (day-time only)

Project Site	Road Segment ID	X coordiante	Y coordinate	Ground mPD level, m	X Length, m	Y Length, m	Emission Height, m	Angle, degree	Unmitigated *				
									Calculated emission rate, g/m/s	Total emission, g/s	Emission rate, g/m ² /s	Int. Vert. Dim.	
													A
					B	C							
Yau Mei	HR34	823606.25	837783.42	2	21	6	0.5	-107	1.68E-03	3.52E-02	2.79E-04	0	
Yau Mei	HR35	823600.55	837800.67	2	10	6	0.5	-31	1.68E-03	1.68E-02	2.79E-04	0	
Yau Mei	HR36	823609.29	837806.18	2	35	6	0.5	-29	1.68E-03	5.86E-02	2.79E-04	0	
Yau Mei	HR37	823639.8	837823.3	2	35	6	0.5	-11	1.68E-03	5.86E-02	2.79E-04	0	
Yau Mei	HR38	823674.9	837829.9	2	10	6	0.5	-27	1.68E-03	1.68E-02	2.79E-04	0	
Yau Mei	HR39	823684.2	837835.1	2	35	6	0.5	-43	1.68E-03	5.86E-02	2.79E-04	0	
Yau Mei	HR40	823711.5	837860.7	2	14	6	0.5	-83	1.68E-03	2.35E-02	2.79E-04	0	
Yau Mei	HR41	823715.49	837876.74	2	21	6	0.5	-141	1.68E-03	3.52E-02	2.79E-04	0	
Yau Mei	HR42	823699.06	837890.03	2	35	6	0.5	-157	1.68E-03	5.86E-02	2.79E-04	0	
Yau Mei	HR43	823665.74	837904.45	2	35	6	0.5	-169	1.68E-03	5.86E-02	2.79E-04	0	
Yau Mei	HR44	823632.84	837910.8	2	35	6	0.5	-152	1.68E-03	5.86E-02	2.79E-04	0	
Yau Mei	HR45	823602.58	837926.84	2	35	6	0.5	-143	1.68E-03	5.86E-02	2.79E-04	0	
Yau Mei	HR46	823574.8	837948.13	2	20	6	0.5	-143	1.68E-03	3.35E-02	2.79E-04	0	

Remark: * Please refer to Appendix 3-2F for the calculation of emission factors.

**Directly Extracted from Appendix 3-2 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-2E Summary Table of Calculated TSP Emissions Modeling Input Data During Removal of Surcharge (Mitigated Scenario)

For both the unmitigated scenario and mitigated scenarios, since there will be no construction activities during restricted hours, and on Sundays and general holidays, the calculated emission rates have been applied to day-time hours during general weekdays only (i.e. 0800 to 1800 hours). While from 1800 to 0800 hours during general workdays, and on Sunday and general holidays (whole day) are adopted for impact assessment of wind erosion on the site.

Cut and Cover (day-time only)

Project Site	Ref. ID	X coordinate	Y coordinate	Elevation, m	Release Height, m	Mitigated *	
						Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	Y01	823716	837918	2	0	2.26E-05	0
Yau Mei	Y02	823762.638	837885.693	2	0	2.26E-05	0
Yau Mei	Y03	823791.862	837841.201	2	0	2.26E-05	0
Yau Mei	Y04	823736.167	837827.063	2	0	2.26E-05	0
Yau Mei	Y05	823630.998	837877.023	2	0	2.26E-05	0
Yau Mei	Y06	823631	837877	2	0	2.26E-05	0
Yau Mei	Y07	823661.372	837860.749	2	0	2.26E-05	0
Yau Mei	Y08	823577.758	838018.797	2	0	2.26E-05	0
Yau Mei	Y09	823471.666	838003.9	2	0	2.26E-05	0
Yau Mei	Y10	823509.885	837938.972	2	0	2.26E-05	0
Yau Mei	Y11	823610.592	837970.06	2	0	2.26E-05	0
Yau Mei	Y12	823652.24	837942.697	2	0	2.26E-05	0
Yau Mei	Y13	823604.809	837915.329	2	0	2.26E-05	0
Yau Mei	Y14	823576.077	837875.705	2	0	2.26E-05	0
Yau Mei	Y15	823505.176	837857.374	2	0	2.26E-05	0
Yau Mei	Y16	823473.021	837825.291	2	0	2.26E-05	0
Yau Mei	Y17	823525.379	837798.17	2	0	2.26E-05	0
Yau Mei	Y18	823540.631	837900.732	2	0	2.26E-05	0
Yau Mei	Y19	823577.386	837822.631	2	0	2.26E-05	0
Yau Mei	Y20	823638.814	837832.11	2	0	2.26E-05	0
Yau Mei	Y21	823594.362	837784.138	2	0	2.26E-05	0

Wind Erosion

Project Site	Ref. ID	X coordinate	Y coordinate	Elevation, m	Release Height, m	Night-time only *		Day-time only *	
						Emission rate, g/m ² /s	Int. Vert. Dim.	Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	Y01	823716	837918	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y02	823762.638	837885.693	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y03	823791.862	837841.201	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y04	823736.167	837827.063	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y05	823630.998	837877.023	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y06	823631	837877	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y07	823661.372	837860.749	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y08	823577.758	838018.797	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y09	823471.666	838003.9	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y10	823509.885	837938.972	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y11	823610.592	837970.06	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y12	823652.24	837942.697	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y13	823604.809	837915.329	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y14	823576.077	837875.705	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y15	823505.176	837857.374	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y16	823473.021	837825.291	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y17	823525.379	837798.17	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y18	823540.631	837900.732	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y19	823577.386	837822.631	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y20	823638.814	837832.11	2	0	2.70E-06	0	2.70E-07	0
Yau Mei	Y21	823594.362	837784.138	2	0	2.70E-06	0	2.70E-07	0

Inputs to the ISCST Model:

	Calculated Emission Rate *	Emission Rate Factor **
General Workdays	Day-time (A)	2.26E-05
	Night-time (B)	2.70E-06
		0.11950 =B/A

Remark: * Please refer to Appendices 3-2F for the calculation of emission factors.

** For general workdays, in order to simulate calculated emission rate due to wind erosion during nighttime period, the "Emission Rate Factor" is applied from 1800 to 0800 hours in the ISCST model. Similarly, for Sundays and Holidays, the calculated emission rate due to wind erosion during day-time period is simulated by adopting the "Emission Rate Factor" from 0800 to 1800 hours in the ISCST model.

**Directly Extracted from Appendix 3-2 of the Approved EIA Report
of the “Yau Mei Site” Project (AEIAR-189/2015)**

Travelling on Haul Road (paved) (day-time only)

Project Site	Road Segment ID	X coordiante	Y coordinate	Ground mPD level, m	X Length, m	Y Length, m	Emission Height, m	Angle, degree	Mitigated *			Int. Vert. Dim.
									Calculated emission rate, g/m/s	Total emission, g/s	Emission rate, g/m ² /s	
									D	= (D*B)	=(D*B)/(B*C)	
Yau Mei	HR34	823606.25	837783.42	2	21	6	0.5	-107	1.68E-04	3.52E-03	2.79E-05	0
Yau Mei	HR35	823600.55	837800.67	2	10	6	0.5	-31	1.68E-04	1.68E-03	2.79E-05	0
Yau Mei	HR36	823609.29	837806.18	2	35	6	0.5	-29	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR37	823639.8	837823.3	2	35	6	0.5	-11	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR38	823674.9	837829.9	2	10	6	0.5	-27	1.68E-04	1.68E-03	2.79E-05	0
Yau Mei	HR39	823684.2	837835.1	2	35	6	0.5	-43	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR40	823711.5	837860.7	2	14	6	0.5	-83	1.68E-04	2.35E-03	2.79E-05	0
Yau Mei	HR41	823715.49	837876.74	2	21	6	0.5	-141	1.68E-04	3.52E-03	2.79E-05	0
Yau Mei	HR42	823699.06	837890.03	2	35	6	0.5	-157	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR43	823665.74	837904.45	2	35	6	0.5	-169	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR44	823632.84	837910.8	2	35	6	0.5	-152	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR45	823602.58	837926.84	2	35	6	0.5	-143	1.68E-04	5.86E-03	2.79E-05	0
Yau Mei	HR46	823574.8	837948.13	2	20	6	0.5	-143	1.68E-04	3.35E-03	2.79E-05	0

Remark: * Please refer to Appendix 3-2F for the calculation of emission factors.

**Directly Extracted from Appendix 3-2 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-2F Calculation of TSP Emission Rates of the Project Site During Removal of Surcharge (Both Unmitigated and Mitigated Scenarios)

Type of Work	Type of Emission Factor	Parameter		Remark
Wind Erosion on Exposed Ground	(1) Wind Erosion (day-time)	TSP emission factor (Mg/hectare/year)	0.85	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed.
		Emission rate, g/m²/s (unmitigated)	2.70E-06	$=((0.85 \times 1000000)/10000\text{m}^2)/(365 \times 24 \times 60 \times 60)$
		% of dust suppression [#]	90.0%	for watering 8 times per day [#]
		Emission rate, g/m²/s (mitigated)	2.70E-07	
	(1) Wind Erosion (night-time)	TSP emission factor (Mg/hectare/year)	0.85	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed.
		Emission rate, g/m²/s (unmitigated)	2.70E-06	$=((0.85 \times 1000000)/10000\text{m}^2)/(365 \times 24 \times 60 \times 60)$
Cut and Cover Activites	(2) Bulldozing & Surface Compacting (day-time only)	Eqn.: $E = 2.6 (s)^{1.2} / (M)^{1.3}$		USEPA AP-42, S11.9, Table 11.9-2, 7/98 ed. *
		Material moisture content (%), M	2.2	To represent the worst case scenario, the lowest moisture content within the range specified for overburden in the USEPA AP-42, S11.9, Table 11.9-3, 7/98 ed., is adopted
		Material silt content (%), s	15.1	To represent the worst case scenario, the highest silt content within the range specified for overburden in the USEPA AP-42, S11.9, Table 11.9-3, 7/98 ed., is adopted
		Calculated Emission Factor (kg/hr), E	2.42E+01	
		Site Area (m ²), A ***	44000	-
		Calculated emission rate (unmitigated) (g/m²/s)	1.53E-04	$= (E \times 1000) / A / (60 \times 60)$
		% of dust suppression [#]	90.0%	for watering 8 times per day [#]
		Calculated emission rate, g/m²/s (mitigated)	1.53E-05	Due to % of dust suppression.
	(3) Removal/ unloading soil materials by excavators (day-time only)	Emission Factor of excavator unloading topsoil (kg/Mg), E1	0.02	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed. (scraper unloading topsoil is adopted). *
		Topsoil removal by excavator (kg/Mg), E2	0.029	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed. (Topsoil removal by scraper is adopted). *
		Total Emission by excavator (kg/Mg), E= E1+E2	4.90E-02	
		Total quantity of materials involved (m ³), Q	105000	The total amount of concerned surcharge materials to be removed as provided by Engineer
		No. of months for site formation (Phases B to D), m	4.5	Total duration of "removal of surcharge" of concerned site formation works.
No. of working days per month, d		25	From Project Engineer	
No. of working hours per day, h		10	From Project Engineer (working hours = 0800 hr to 1800 hr)	
Average hourly output (m ³ /hr), O1		93.33	$= Q / (m \times d \times h)$	
Average hourly output (Mg/hr), O2		233.33	$= O1 \times 2.5\text{Mg/m}^3$. Assuming the truck capacity of 6m ³ and 15 tons (i.e. soil density of 2.5 Mg/m ³).	
Site Area (m ²), A ***		44000	-	
Calculated emission rate (unmitigated) (g/m²/s)	7.22E-05	$= (O2 \times (E \times 1000) / A) / (60 \times 60)$		
% of dust suppression [#]	90.0%	for watering 8 times per day [#]		
Calculated emission rate (mitigated) (g/m²/s)	7.22E-06			

**Directly Extracted from Appendix 3-2 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Type of Work	Type of Emission Factor	Parameter		Remark		
(4) Earth Handling/ Loading, Unloading, and stockpiling (day-time only)		Eqn.: $E = k \times (0.0016) \times ((U/2.2)^{1.3} / (M/2)^{1.4})$		USEPA AP-42, S13.2.4, 11/06 ed. *		
		Particle size multiplier, k	0.74	USEPA AP-42, S13.2.4, 11/06 ed.		
		Mean wind speed (m/s), U	1.85	Based on year 2010 average wind speed recorded at Wetland Park Station of Hong Kong Observatory.		
		Material moisture content (%), M	2.2	Pls. refer to Works Item no. 2 above		
		Calculated Emission Factor (kg/Mg), E	0.00083	$E = k \times (0.0016) \times ((U/2.2)^{1.3} / (M/2)^{1.4})$		
		Total quantity of materials involved (m ³), Q	105000	The total amount of concerned surcharge materials to be removed as provided by Engineer		
		No. of months for site formation, m	4.5	Total duration of "removal of surcharge" of concerned site formation works.		
		No. of working days per month, d	25	From Project Engineer		
		No. of working hours per day, h	10	From Project Engineer (working hours = 0800 hr to 1800 hr)		
		Average hourly output (m ³ /hr), O1	93.33	= Q/(m*d*h)		
		Average hourly output (Mg/hr), O2	233.33	= O1 x 2.5Mg/m ³ . Assuming the truck capacity of 6m ³ and 15 tons (i.e. soil density of 2.5 Mg/m ³).		
		Site Area (m ²), A ***	44000	-		
		Calculated emission rate (unmitigated) (g/m ² /s)	1.22E-06	= (O2 x (E x 1000)/ A)/(60*60)		
		% of dust suppression #	90.0%	for watering 8 times per day #		
		Calculated emission rate (mitigated) (g/m ² /s)	1.22E-07			
		Total Emission for "Cut and Cover" (= (2) + (3) + (4))		Total Emission rate, g/m ² /s (Unmitigated) (day-time only)	2.26E-04	Calculated total emission factor for "Cut and Cover".
				Total Emission rate, g/m ² /s (mitigated) (day-time only)	2.26E-05	Calculated total emission factor for "Cut and Cover" ##.
		Vehicle movement on Haul Road	(5) Paved Haul Road (day-time only)	Eqn.: $E = k \times (sL)^{0.91} \times (W)^{1.02}$		USEPA AP-42, S13.2.1, 11/06 ed.
				Particle size multiplier (g/VKT), k	3.23	USEPA AP-42, S13.2.1, 11/06 ed., Table 13.2.1-1 for PM-30.
				Road surface silt loading (g/m ²), sL	14	To represent the worst case scenario, the highest silt loading within the range of typical values specified for quarry operation in the USEPA AP-42, S13.2.1, 1/11 ed., Table 13.2.1-3, is adopted. **
Mean vehicle weight (tons), W	16			The average weight of the empty truck and full load truck.		
Calculated Emission Factor (g/VKT), E1	603.09			$E = k \times (sL)^{0.91} \times (W)^{1.02}$		
Calculated emission factor (g/v-m), E2	0.603			= E1/1000		
Average no. of trucks (veh./hr), T	10			Estimated maximum no. of trucks per hour from Engineer		
Calculated emission rate (unmitigated), g/m/s	1.68E-03			= E2*(T/60*60)		
% of dust suppression #	90.0%			for watering 8 times per day #		
Calculated emission rate (mitigated), g/m/s	1.68E-04					

Remark:

Please refer to Appendix 3-9 for calculation of dust suppression efficiency.

Due to the phased construction area, only limited space and construction plants will be available for construction in any one time. Thus, the construction activities under the "Cut and Cover" category that would contribute to dust emissions will unlikely to operate at the same time. In fact, only one of the above activities will operate in any one time. However, to be conservative, air quality impacts due to simultaneous construction of these activities has been taken into account in the assessment.

* The equation recommended for concerned particular construction activity as per Section 13.2.3 of USEPA AP-42 regarding heavy construction operation.

** The concerned construction activity of this Project during site formation stage will involve earth movement activities and transportation of excavated/ fill materials, etc. The nature of these activities is similar to that of quarry operation. Thus, the typical silt loading within the range of typical values from quarry site, as stipulated in USEPA AP-42, Table 13.2.1-3, S13.2.1, 11/06 ed., is adopted in the above equation. The reported highest silt loading value has been used in this exercise for worst case scenario. It is noted that similar assumption has also been adopted for paved construction haul road in the approved EIA report, Appendix F of the "EIA-032/1999 - East Rail Extension Hung Hom to Tsim Sha Tsui - Environmental Impact Assessment".

*** Total site area of Phases B to D as well as buffer planting area along its edge in adjacent to the WRA, is taken as 4.4ha.

***Calculated Emission Factors for RSP of "Yau Mei Site"
Project***

***Directly Extracted from Appendix 3-3 on the Approved EIA
Report of the "Yau Mei Site" Project (AEIAR-189/2015)***

**Calculation of Emission Factors During
Filling/ Excavation Works**

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-3A Summary Table of Calculated RSP Emissions Modeling Input Data During Filling/ Excavation Works (Unmitigated Scenario)

For both the unmitigated scenario and mitigated scenarios, since there will be no construction activities during restricted hours, and on Sundays and general holidays, the calculated emission rates have been applied to day-time hours during general weekdays only (i.e. 0800 to 1800 hours). While from 1800 to 0800 hours during general workdays, and on Sunday and general holidays (whole day) are adopted for impact assessment of wind erosion on the site.

Cut and Cover (day-time only)

							Unmitigated *	
Project Site	Ref. ID	X coordinate	Y coordinate	Elevation, m	Release Height, m	Emission rate, g/m ² /s	Int. Vert. Dim.	
Yau Mei	B1	823791.7	837839.3	2	0	8.19E-05	0	0
Yau Mei	C1	823674.3	837936.5	2	0	8.19E-05	0	0
Yau Mei	C2	823611.3	837992.5	2	0	8.19E-05	0	0
Yau Mei	D1	823556.8	837822.6	2	0	8.19E-05	0	0
Yau Mei	D2	823530.8	837837.1	2	0	8.19E-05	0	0

Wind Erosion

							Night-time only *		Day-time only *	
Project Site	Ref. ID	X coordinate	Y coordinate	Elevation, m	Release Height, m	Emission rate, g/m ² /s	Int. Vert. Dim.	Emission rate, g/m ² /s		
Yau Mei	B1	823791.7	837839.3	2	0	1.37E-06	0	1.37E-06	0	
Yau Mei	C1	823674.3	837936.5	2	0	1.37E-06	0	1.37E-06	0	
Yau Mei	C2	823611.3	837992.5	2	0	1.37E-06	0	1.37E-06	0	
Yau Mei	D1	823556.8	837822.6	2	0	1.37E-06	0	1.37E-06	0	
Yau Mei	D2	823530.8	837837.1	2	0	1.37E-06	0	1.37E-06	0	

Travelling on Haul Road (unpaved) (day-time only)

										Unmitigated *			
Project Site	Road Segment ID	X coordinate	Y coordinate	Ground mPD level, m	X Length, m	Y Length, m	Emission Height, m	Angle, degree	Calculated emission rate, g/m/s	Total emission, g/s	Emission rate, g/m ² /s	Int. Vert. Dim.	
					B	C				A	= (A*B)	= (A*B)/(B*C)	
Yau Mei	HR34	823606.25	837783.42	2	21	6	0.5	-107	3.22E-04	6.75E-03	5.36E-05	0	
Yau Mei	HR35	823600.55	837800.67	2	10	6	0.5	-31	3.22E-04	3.22E-03	5.36E-05	0	
Yau Mei	HR36	823609.29	837806.18	2	35	6	0.5	-29	3.22E-04	1.13E-02	5.36E-05	0	
Yau Mei	HR37	823639.8	837823.3	2	35	6	0.5	-11	3.22E-04	1.13E-02	5.36E-05	0	
Yau Mei	HR38	823674.9	837829.9	2	10	6	0.5	-27	3.22E-04	3.22E-03	5.36E-05	0	
Yau Mei	HR39	823684.2	837835.1	2	35	6	0.5	-43	3.22E-04	1.13E-02	5.36E-05	0	
Yau Mei	HR40	823711.5	837860.7	2	14	6	0.5	-83	3.22E-04	4.50E-03	5.36E-05	0	
Yau Mei	HR41	823715.49	837876.74	2	21	6	0.5	-141	3.22E-04	6.75E-03	5.36E-05	0	
Yau Mei	HR42	823699.06	837890.03	2	35	6	0.5	-157	3.22E-04	1.13E-02	5.36E-05	0	
Yau Mei	HR43	823665.74	837904.45	2	35	6	0.5	-169	3.22E-04	1.13E-02	5.36E-05	0	
Yau Mei	HR44	823632.84	837910.8	2	35	6	0.5	-152	3.22E-04	1.13E-02	5.36E-05	0	
Yau Mei	HR45	823602.58	837926.84	2	35	6	0.5	-143	3.22E-04	1.13E-02	5.36E-05	0	
Yau Mei	HR46	823574.8	837948.13	2	20	6	0.5	-143	3.22E-04	6.43E-03	5.36E-05	0	

Remark: * Please refer to Appendix 3-3C for the calculation of emission factors.

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-3B Summary Table of Calculated RSP Emissions Modeling Input Data During Filling/Excavation Works (Mitigated Scenario)

For both the unmitigated scenario and mitigated scenarios, since there will be no construction activities during restricted hours, and on Sundays and general holidays, the calculated emission rates have been applied to day-time hours during general weekdays only (i.e. 0800 to 1800 hours). While from 1800 to 0800 hours during general workdays, and on Sunday and general holidays (whole day) are adopted for impact assessment of wind erosion on the site.

Cut and Cover (day-time only)

Project Site	Ref. ID	X coordinate	Y coordinate	Elevation, m	Release Height, m	Mitigated *	
						Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	Y01	823716	837918	2	0	8.19E-06	0
Yau Mei	Y02	823762.638	837885.693	2	0	8.19E-06	0
Yau Mei	Y03	823791.862	837841.201	2	0	8.19E-06	0
Yau Mei	Y04	823736.167	837827.063	2	0	8.19E-06	0
Yau Mei	Y05	823630.998	837877.023	2	0	8.19E-06	0
Yau Mei	Y06	823631	837877	2	0	8.19E-06	0
Yau Mei	Y07	823661.372	837860.749	2	0	8.19E-06	0
Yau Mei	Y08	823577.758	838018.797	2	0	8.19E-06	0
Yau Mei	Y09	823471.666	838003.9	2	0	8.19E-06	0
Yau Mei	Y10	823509.885	837938.972	2	0	8.19E-06	0
Yau Mei	Y11	823610.592	837970.06	2	0	8.19E-06	0
Yau Mei	Y12	823652.24	837942.697	2	0	8.19E-06	0
Yau Mei	Y13	823604.809	837915.329	2	0	8.19E-06	0
Yau Mei	Y14	823576.077	837875.705	2	0	8.19E-06	0
Yau Mei	Y15	823505.176	837857.374	2	0	8.19E-06	0
Yau Mei	Y16	823473.021	837825.291	2	0	8.19E-06	0
Yau Mei	Y17	823525.379	837798.17	2	0	8.19E-06	0
Yau Mei	Y18	823540.631	837900.732	2	0	8.19E-06	0
Yau Mei	Y19	823577.386	837822.631	2	0	8.19E-06	0
Yau Mei	Y20	823638.814	837832.11	2	0	8.19E-06	0
Yau Mei	Y21	823594.362	837784.138	2	0	8.19E-06	0

Wind Erosion

Project Site	Ref. ID	X coordinate	Y coordinate	Elevation, m	Release Height, m	Night-time only *		Day-time only *	
						Emission rate, g/m ² /s	Int. Vert. Dim.	Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	Y01	823716	837918	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y02	823762.638	837885.693	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y03	823791.862	837841.201	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y04	823736.167	837827.063	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y05	823630.998	837877.023	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y06	823631	837877	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y07	823661.372	837860.749	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y08	823577.758	838018.797	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y09	823471.666	838003.9	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y10	823509.885	837938.972	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y11	823610.592	837970.06	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y12	823652.24	837942.697	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y13	823604.809	837915.329	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y14	823576.077	837875.705	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y15	823505.176	837857.374	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y16	823473.021	837825.291	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y17	823525.379	837798.17	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y18	823540.631	837900.732	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y19	823577.386	837822.631	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y20	823638.814	837832.11	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y21	823594.362	837784.138	2	0	1.37E-06	0	1.37E-06	0

Inputs to the ISCST Model:

Calculated Emission Rate *		Emission Rate Factor **
General Workdays	Day-time (A) 8.19E-06	0.16730 =B/A
	Night-time (B) 1.37E-06	

Remark: * Please refer to Appendices 3-3C for the calculation of emission factors.

** For general workdays, in order to simulate calculated emission rate due to wind erosion during nighttime period, the "Emission Rate Factor" is applied from 1800 to 0800 hours in the ISCST model. Similarly, for Sundays and Holidays, the calculated emission rate due to wind erosion during day-time period is simulated by adopting the "Emission Rate Factor" from 0800 to 1800 hours in the ISCST model.

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Travelling on Haul Road (paved) (day-time only)

Project Site	Road Segment ID	X coordiante	Y coordinate	Ground mPD level, m	X Length, m	Y Length, m	Emission Height, m	Angle, degree	Mitigated *			Int. Vert. Dim.	
									Calculated emission rate, g/m/s	Total emission, g/s	Emission rate, g/m ² /s		
									D	= (D*B)	=(D*B)/(B*C)		
Yau Mei	HR34	823606.25	837783.42	2	21		6	0.5	-107	3.22E-05	6.75E-04	5.36E-06	0
Yau Mei	HR35	823600.55	837800.67	2	10		6	0.5	-31	3.22E-05	3.22E-04	5.36E-06	0
Yau Mei	HR36	823609.29	837806.18	2	35		6	0.5	-29	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR37	823639.8	837823.3	2	35		6	0.5	-11	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR38	823674.9	837829.9	2	10		6	0.5	-27	3.22E-05	3.22E-04	5.36E-06	0
Yau Mei	HR39	823684.2	837835.1	2	35		6	0.5	-43	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR40	823711.5	837860.7	2	14		6	0.5	-83	3.22E-05	4.50E-04	5.36E-06	0
Yau Mei	HR41	823715.49	837876.74	2	21		6	0.5	-141	3.22E-05	6.75E-04	5.36E-06	0
Yau Mei	HR42	823699.06	837890.03	2	35		6	0.5	-157	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR43	823665.74	837904.45	2	35		6	0.5	-169	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR44	823632.84	837910.8	2	35		6	0.5	-152	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR45	823602.58	837926.84	2	35		6	0.5	-143	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR46	823574.8	837948.13	2	20		6	0.5	-143	3.22E-05	6.43E-04	5.36E-06	0

Remark: * Please refer to Appendix 3-3C for the calculation of emission factors.

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-3C Calculation of RSP Emission Rates of the Project Site During Filling/ Excavation Works (Both Unmitigated and Mitigated Scenarios)

Type of Work	Type of Emission Source	Parameter	Value	Remark	
Wind Erosion on Exposed Ground	(1) Wind Erosion (day-time)	TSP emission factor (Mg/hectare/year)	0.85	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed.	
		Calculated RSP emission factor (Mg/hectare/year)	0.43	Converted from the above TSP emission factor based on a ratio of 0.51 for RSP/TSP. ®	
		Emission rate, g/m²/s (unmitigated)	1.37E-06	=[(0.43*1000000)/10000m ² /(365*24*60*60)]	
		% of dust suppression [#]	90.0%	for watering 8 times per day [#]	
		Emission rate, g/m²/s (mitigated)	1.37E-07		
	(1) Wind Erosion (night-time)	TSP emission factor (Mg/hectare/year)	0.85	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed.	
		Calculated RSP emission factor (Mg/hectare/year)	0.43	Converted from the above TSP emission factor based on a ratio of 0.51 for RSP/TSP. ®	
		Emission rate, g/m²/s (unmitigated)	1.37E-06	=[(0.43*1000000)/10000m ² /(365*24*60*60)]	
Cut and Cover Activites	(2) Bulldozing & Surface Compacting (day-time only)	Eqn.: $E = (0.45 (s)^{-1.5} / (M)^{1.4}) \times 0.75$		USEPA AP-42, S11.9, Table 11.9-2, 7/98 ed. (Based on the eqn. of particle size <= 15 µm. According to Table 11.9-2 of the AP-42, a scaling factor of 0.75 has been applied to the equation in order to represent RSP emission factor) *	
		Material moisture content (%), M	2.2	To represent the worst case scenario, the lowest moisture content within the range specified for overburden in the USEPA AP-42, S11.9, Table 11.9-3, 7/98 ed., is adopted	
		Material silt content (%), s	15.1	To represent the worst case scenario, the highest silt content within the range specified for overburden in the USEPA AP-42, S11.9, Table 11.9-3, 7/98 ed., is adopted	
		Calculated Emission Factor (kg/hr), E	6.57E+00		
		Site Area (m ²), A ***	44000	-	
		Calculated emission rate (unmitigated) (g/m²/s)	4.15E-05	= (E*1000)/A/(60*60)	
		% of dust suppression [#]	90.0%	for watering 8 times per day [#]	
		Calculated emission rate, g/m²/s (mitigated)	4.15E-06	Due to % of dust suppression.	
		(3) Removal/ unloading soil materials by excavators (day-time only)	Emission Factor of excavator unloading topsoil (kg/Mg), E1	0.02	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed. (scraper unloading topsoil is adopted). *
			Topsoil removal by excavator (kg/Mg), E2	0.029	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed. (Topsoil removal by scraper is adopted). *
	Total Emission by excavator (kg/Mg), E1+E2		4.90E-02		
	Calculated RSP Emission by excavator (kg/Mg), E = (E1+E2) x0.51)		2.50E-02	Converted from the above TSP emission factor based on a ratio of 0.51 for RSP/TSP. ®	
	Total quantity of materials involved (m ³), Q		277500	The total amount of concerned excavated materials and imported fill materials as provided by Engineer	
	No. of months for site formation (Phase B to D), m		11	Total duration of "excavation and filling works" of concerned site formation works.	
	No. of working days per month, d		25	From Project Engineer	
No. of working hours per day, h	10	From Project Engineer (working hours = 0800 hr to 1800 hr)			
Average hourly output (m ³ /hr), O1	100.91	= Q/(m*d*h)			
Average hourly output (Mg/hr), O2	252.27	= O1 x 2.5Mg/m ³ . Assuming the truck capacity of 6m ³ and 15 tons (i.e. soil density of 2.5 Mg/m ³).			
Site Area (m ²), A ***	44000	-			
Calculated emission rate (unmitigated) (g/m²/s)	3.98E-05	= (O2 x (E x 1000)/ A)/(60*60)			
% of dust suppression [#]	90.0%	for watering 8 times per day [#]			
Calculated emission rate (mitigated) (g/m²/s)	3.98E-06				

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Type of Work	Type of Emission Source	Parameter		Remark		
	(4) Earth Handling/ Loading, Unloading, and stockpiling (day-time only)	Eqn.: $E = k \times (0.0016) \times ((U/2.2)^{1.3} / (M/2)^{1.4})$		USEPA AP-42, S13.2.4, 11/06 ed. *		
		Particle size multiplier, k	0.35	particle size multiplier for particle size of 10 µm		
		Mean wind speed (m/s), U	1.85	Based on year 2010 average wind speed recorded at Wetland Park Station of Hong Kong Observatory.		
		Material moisture content (%), M	2.2	Pls. refer to Works Item no. 2 above		
		Calculated Emission Factor (kg/Mg), E	0.00039	$E = k \times (0.0016) \times ((U/2.2)^{1.3} / (M/2)^{1.4})$		
		Total quantity of materials involved (m ³), Q	277500	The total amount of concerned excavated materials and imported fill materials as provided by Engineer		
		No. of months for site formation, m	11	Total duration of "excavation and filling works" of concerned site formation works.		
		No. of working days per month, d	25	From Project Engineer		
		No. of working hours per day, h	10	From Project Engineer (working hours = 0800 hr to 1800 hr)		
		Average hourly output (m ³ /hr), O1	100.91	= Q/(m*d*h)		
		Average hourly output (Mg/hr), O2	252.27	= O1 x 2.5Mg/m ³ . Assuming the truck capacity of 6m ³ and 15 tons (i.e. soil density of 2.5 Mg/m ³).		
		Site Area (m ²), A ***	44000	-		
		Calculated emission rate (unmitigated) (g/m ² /s)	6.21E-07	= (O2 x (E x 1000)/ A)/(60*60)		
		% of dust suppression #	90.0%	for watering 8 times per day #		
		Calculated emission rate (mitigated) (g/m ² /s)	6.21E-08			
		Total Emission for "Cut and Cover" (= (2) + (3) + (4))	Total Emission rate, g/m ² /s (Unmitigated) (day-time only)	8.19E-05	Calculated total emission factor for "Cut and Cover".	
			Total Emission rate, g/m ² /s (mitigated) (day-time only)	8.19E-06	Calculated total emission factor for "Cut and Cover" ##.	
		Vehicle movement on Haul Road	(5) Paved Haul Road (day-time only)	Eqn.: $E = k \times (sL)^{0.91} \times (W)^{1.02}$		USEPA AP-42, S13.2.1, 11/06 ed.
				Particle size multiplier (g/VKT), k	0.62	USEPA AP-42, S13.2.1, 11/06 ed., Table 13.2.1-1 for PM-10.
				Road surface silt loading (g/m ²), sL	14	To represent the worst case scenario, the highest silt loading within the range of typical values specified for quarry operation in the USEPA AP-42, S13.2.1, 1/11 ed., Table 13.2.1-3, is adopted. **
				Mean vehicle weight (tons), W	16	The average weight of the empty truck and full load truck.
				Calculated Emission Factor (g/VKT), E1	115.76	$E = k \times (sL)^{0.91} \times (W)^{1.02}$
Calculated emission factor (g/v-m), E2	0.116			= E1/1000		
Average no. of trucks (veh./hr), T	10			Estimated maximum no. of trucks per hour from Engineer		
Calculated emission rate (unmitigated), g/m/s	3.22E-04			= E2*(T/60*60)		
% of dust suppression #	90.0%			for watering 8 times per day #		
Calculated emission rate (mitigated), g/m/s	3.22E-05					

Remark:

Please refer to Appendix 3-9 for calculation of dust suppression efficiency.

Due to the phased construction area, only limited space and construction plants will be available for construction in any one time. Thus, the construction activities under the "Cut and Cover" category that would contribute to dust emissions will unlikely to operate at the same time. In fact, only one of the above activities will operate in any one time. However, to be conservative, air quality impacts due to simultaneous construction of these activities has been taken into account in the assessment.

* The equation recommended for concerned particular construction activity as per Section 13.2.3 of USEPA AP-42 regarding heavy construction operation.

** The concerned construction activity of this Project during site formation stage will involve earth movement activities and transportation of excavated/ fill materials, etc. The nature of these activities is similar to that of quarry operation. Thus, the typical silt loading within the range of typical values from quarry site, as stipulated in USEPA AP-42, Table 13.2.1-3, S13.2.1, 11/06 ed., is adopted in the above equation. The reported highest silt loading value has been used in this exercise for worst case scenario. It is noted that similar assumption has also been adopted for paved construction haul road in the approved EIA report, Appendix F of the "EIA-032/1999 - East Rail Extension Hung Hom to Tsim Sha Tsui - Environmental Impact Assessment".

*** Total site area of Phases B to D as well as buffer planting area along its edge in adjacent to the WRA, is taken as 4.4ha.

@ Based on conservative ratio reported in literature. Please refer to Appendix 3-10 for the justification.

***Calculated Emission Factors for RSP of "Yau Mei Site"
Project***

***²Directly Extracted from Appendix 3-3 on the Approved EIA
Report of the "Yau Mei Site" Project (AEIAR-189/2015)***

**Calculation of Emission Factors During
Removal of Surcharge**

Appendix 3-3D Summary Table of Calculated RSP Emissions Modeling Input Data During Removal of Surcharge (Unmitigated Scenario)

For both the unmitigated scenario and mitigated scenarios, since there will be no construction activities during restricted hours, and on Sundays and general holidays, the calculated emission rates have been applied to day-time hours during general weekdays only (i.e. 0800 to 1800 hours). While from 1800 to 0800 hours during general workdays, and on Sunday and general holidays (whole day) are adopted for impact assessment of wind erosion on the site.

Cut and Cover (day-time only)

Project Site	Ref. ID	X coordiante	Y coordinate	Elevation, m	Release Height, m	Unmitigated *	
						Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	B1	823791.7	837839.3	2	0	7.88E-05	0
Yau Mei	C1	823674.3	837936.5	2	0	7.88E-05	0
Yau Mei	C2	823611.3	837992.5	2	0	7.88E-05	0
Yau Mei	D1	823556.8	837822.6	2	0	7.88E-05	0
Yau Mei	D2	823530.8	837837.1	2	0	7.88E-05	0

Wind Erosion

Project Site	Ref. ID	X coordiante	Y coordinate	Elevation, m	Release Height, m	Night-time only *		Day-time only *
						Emission rate, g/m ² /s	Int. Vert. Dim.	
Yau Mei	B1	823791.7	837839.3	2	0	1.37E-06	0	1.37E-06
Yau Mei	C1	823674.3	837936.5	2	0	1.37E-06	0	1.37E-06
Yau Mei	C2	823611.3	837992.5	2	0	1.37E-06	0	1.37E-06
Yau Mei	D1	823556.8	837822.6	2	0	1.37E-06	0	1.37E-06
Yau Mei	D2	823530.8	837837.1	2	0	1.37E-06	0	1.37E-06

Travelling on Haul Road (unpaved) (day-time only)

Project Site	Road Segment ID	X coordiante	Y coordinate	Ground mPD level, m	X Length, m	Y Length, m	Emission Height, m	Angle, degree	Unmitigated *			
									Calculated emission rate, g/m/s	Total emission, g/s	Emission rate, g/m ² /s	Int. Vert. Dim.
					B	C						
Yau Mei	HR34	823606.25	837783.42	2	21	6	0.5	-107	3.22E-04	6.75E-03	5.36E-05	0
Yau Mei	HR35	823600.55	837800.67	2	10	6	0.5	-31	3.22E-04	3.22E-03	5.36E-05	0
Yau Mei	HR36	823609.29	837806.18	2	35	6	0.5	-29	3.22E-04	1.13E-02	5.36E-05	0
Yau Mei	HR37	823639.8	837823.3	2	35	6	0.5	-11	3.22E-04	1.13E-02	5.36E-05	0
Yau Mei	HR38	823674.9	837829.9	2	10	6	0.5	-27	3.22E-04	3.22E-03	5.36E-05	0
Yau Mei	HR39	823684.2	837835.1	2	35	6	0.5	-43	3.22E-04	1.13E-02	5.36E-05	0
Yau Mei	HR40	823711.5	837860.7	2	14	6	0.5	-83	3.22E-04	4.50E-03	5.36E-05	0
Yau Mei	HR41	823715.49	837876.74	2	21	6	0.5	-141	3.22E-04	6.75E-03	5.36E-05	0
Yau Mei	HR42	823699.06	837890.03	2	35	6	0.5	-157	3.22E-04	1.13E-02	5.36E-05	0
Yau Mei	HR43	823665.74	837904.45	2	35	6	0.5	-169	3.22E-04	1.13E-02	5.36E-05	0
Yau Mei	HR44	823632.84	837910.8	2	35	6	0.5	-152	3.22E-04	1.13E-02	5.36E-05	0
Yau Mei	HR45	823602.58	837926.84	2	35	6	0.5	-143	3.22E-04	1.13E-02	5.36E-05	0
Yau Mei	HR46	823574.8	837948.13	2	20	6	0.5	-143	3.22E-04	6.43E-03	5.36E-05	0

Remark: * Please refer to Appendix 3-3F for the calculation of emission factors.

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-3E Summary Table of Calculated RSP Emissions Modeling Input Data During Removal of Surcharge (Mitigated Scenario)

For both the unmitigated scenario and mitigated scenarios, since there will be no construction activities during restricted hours, and on Sundays and general holidays, the calculated emission rates have been applied to day-time hours during general weekdays only (i.e. 0800 to 1800 hours). While from 1800 to 0800 hours during general workdays, and on Sunday and general holidays (whole day) are adopted for impact assessment of wind erosion on the site.

Cut and Cover (day-time only)

Project Site	Ref. ID	X coordinate	Y coordinate	Elevation,m	Release Height, m	Mitigated *	
						Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	Y01	823716	837918	2	0	7.88E-06	0
Yau Mei	Y02	823762.638	837885.693	2	0	7.88E-06	0
Yau Mei	Y03	823791.862	837841.201	2	0	7.88E-06	0
Yau Mei	Y04	823736.167	837827.063	2	0	7.88E-06	0
Yau Mei	Y05	823630.998	837877.023	2	0	7.88E-06	0
Yau Mei	Y06	823631	837877	2	0	7.88E-06	0
Yau Mei	Y07	823661.372	837860.749	2	0	7.88E-06	0
Yau Mei	Y08	823577.758	838018.797	2	0	7.88E-06	0
Yau Mei	Y09	823471.666	838003.9	2	0	7.88E-06	0
Yau Mei	Y10	823509.885	837938.972	2	0	7.88E-06	0
Yau Mei	Y11	823610.592	837970.06	2	0	7.88E-06	0
Yau Mei	Y12	823652.24	837942.697	2	0	7.88E-06	0
Yau Mei	Y13	823604.809	837915.329	2	0	7.88E-06	0
Yau Mei	Y14	823576.077	837875.705	2	0	7.88E-06	0
Yau Mei	Y15	823505.176	837857.374	2	0	7.88E-06	0
Yau Mei	Y16	823473.021	837825.291	2	0	7.88E-06	0
Yau Mei	Y17	823525.379	837798.17	2	0	7.88E-06	0
Yau Mei	Y18	823540.631	837900.732	2	0	7.88E-06	0
Yau Mei	Y19	823577.386	837822.631	2	0	7.88E-06	0
Yau Mei	Y20	823638.814	837832.11	2	0	7.88E-06	0
Yau Mei	Y21	823594.362	837784.138	2	0	7.88E-06	0

Wind Erosion

Project Site	Ref. ID	X coordinate	Y coordinate	Elevation,m	Release Height, m	Night-time only *		Day-time only *	
						Emission rate, g/m ² /s	Int. Vert. Dim.	Emission rate, g/m ² /s	Int. Vert. Dim.
Yau Mei	Y01	823716	837918	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y02	823762.638	837885.693	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y03	823791.862	837841.201	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y04	823736.167	837827.063	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y05	823630.998	837877.023	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y06	823631	837877	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y07	823661.372	837860.749	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y08	823577.758	838018.797	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y09	823471.666	838003.9	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y10	823509.885	837938.972	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y11	823610.592	837970.06	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y12	823652.24	837942.697	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y13	823604.809	837915.329	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y14	823576.077	837875.705	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y15	823505.176	837857.374	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y16	823473.021	837825.291	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y17	823525.379	837798.17	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y18	823540.631	837900.732	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y19	823577.386	837822.631	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y20	823638.814	837832.11	2	0	1.37E-06	0	1.37E-06	0
Yau Mei	Y21	823594.362	837784.138	2	0	1.37E-06	0	1.37E-06	0

Inputs to the ISCST Model:

	Calculated Emission Rate *	Emission Rate Factor **
General Workdays	Day-time (A)	7.88E-06
	Night-time (B)	1.37E-06 0.17390 =B/A

Remark: * Please refer to Appendices 3-3F for the calculation of emission factors.

** For general workdays, in order to simulate calculated emission rate due to wind erosion during nighttime period, the "Emission Rate Factor" is applied from 1800 to 0800 hours in the ISCST model. Similarly, for Sundays and Holidays, the calculated emission rate due to wind erosion during day-time period is simulated by adopting the "Emission Rate Factor" from 0800 to 1800 hours in the ISCST model.

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Travelling on Haul Road (paved) (day-time only)

Project Site	Road Segment ID	X coordiante	Y coordinate	Ground mPD level, m	X Length, m	Y Length, m	Emission Height, m	Angle, degree	Mitigated *			Int. Vert. Dim.	
									Calculated emission rate, g/m/s	Total emission, g/s	Emission rate, g/m ² /s		
					B	C	D						
									= (D*B)	=(D*B)/(B*C)			
Yau Mei	HR34	823606.25	837783.42	2	21		6	0.5	-107	3.22E-05	6.75E-04	5.36E-06	0
Yau Mei	HR35	823600.55	837800.67	2	10		6	0.5	-31	3.22E-05	3.22E-04	5.36E-06	0
Yau Mei	HR36	823609.29	837806.18	2	35		6	0.5	-29	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR37	823639.8	837823.3	2	35		6	0.5	-11	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR38	823674.9	837829.9	2	10		6	0.5	-27	3.22E-05	3.22E-04	5.36E-06	0
Yau Mei	HR39	823684.2	837835.1	2	35		6	0.5	-43	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR40	823711.5	837860.7	2	14		6	0.5	-83	3.22E-05	4.50E-04	5.36E-06	0
Yau Mei	HR41	823715.49	837876.74	2	21		6	0.5	-141	3.22E-05	6.75E-04	5.36E-06	0
Yau Mei	HR42	823699.06	837890.03	2	35		6	0.5	-157	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR43	823665.74	837904.45	2	35		6	0.5	-169	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR44	823632.84	837910.8	2	35		6	0.5	-152	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR45	823602.58	837926.84	2	35		6	0.5	-143	3.22E-05	1.13E-03	5.36E-06	0
Yau Mei	HR46	823574.8	837948.13	2	20		6	0.5	-143	3.22E-05	6.43E-04	5.36E-06	0

Remark: * Please refer to Appendix 3-3F for the calculation of emission factors.

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Appendix 3-3F Calculation of RSP Emission Rates of the Project Site During Removal of Surcharge (Both Unmitigated and Mitigated Scenarios)

Type of Work	Type of Emission Source	Parameter	Value	Remark	
Wind Erosion on Exposed Ground	(1) Wind Erosion (day-time)	TSP emission factor (Mg/hectare/year)	0.85	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed.	
		Calculated RSP emission factor (Mg/hectare/year)	0.43	Converted from the above TSP emission factor based on a ratio of 0.51 for RSP/TSP. ®	
		Emission rate, g/m²/s (unmitigated)	1.37E-06	={(0.43*1000000)/10000m ² /(365*24*60*60)}	
		% of dust suppression #	90.0%	for watering 8 times per day #	
		Emission rate, g/m²/s (mitigated)	1.37E-07		
	(1) Wind Erosion (night-time)	TSP emission factor (Mg/hectare/year)	0.85	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed.	
		Calculated RSP emission factor (Mg/hectare/year)	0.43	Converted from the above TSP emission factor based on a ratio of 0.51 for RSP/TSP. ®	
		Emission rate, g/m²/s (unmitigated)	1.37E-06	={(0.43*1000000)/10000m ² /(365*24*60*60)}	
Cut and Cover Activities	(2) Bulldozing & Surface Compacting (day-time only)	Eqn.: $E = (0.45 (s)^{1.5} / (M)^{1.4}) \times 0.75$		USEPA AP-42, S11.9, Table 11.9-2, 7/98 ed. (Based on the eqn. of particle size <= 15 µm. According to Table 11.9-2 of the AP-42, a scaling factor of 0.75 has been applied to the equation in order to represent RSP emission factor) *	
		Material moisture content (%), M	2.2	To represent the worst case scenario, the lowest moisture content within the range specified for overburden in the USEPA AP-42, S11.9, Table 11.9-3, 7/98 ed., is adopted	
		Material silt content (%), s	15.1	To represent the worst case scenario, the highest silt content within the range specified for overburden in the USEPA AP-42, S11.9, Table 11.9-3, 7/98 ed., is adopted	
		Calculated Emission Factor (kg/hr), E	6.57E+00		
		Site Area (m ²), A ***	44000	-	
		Calculated emission rate (unmitigated) (g/m²/s)	4.15E-05	= (E*1000)/A/(60*60)	
		% of dust suppression #	90.0%	for watering 8 times per day #	
		Calculated emission rate, g/m²/s (mitigated)	4.15E-06	Due to % of dust suppression.	
		(3) Removal/ unloading soil materials by excavators (day-time only)	Emission Factor of excavator unloading topsoil (kg/Mg), E1	0.02	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed. (scraper unloading topsoil is adopted). *
			Topsoil removal by excavator (kg/Mg), E2	0.029	USEPA AP-42, S11.9, Table 11.9-4, 7/98 ed. (Topsoil removal by scraper is adopted). *
	Total Emission by excavator (kg/Mg), E1+E2		4.90E-02		
	Calculated RSP Emission by excavator (kg/Mg), E = (E1+E2) x0.51)		2.50E-02	Converted from the above TSP emission factor based on a ratio of 0.51 for RSP/TSP. ®	
	Total quantity of materials involved (m ³), Q		105000	The total amount of concerned surcharge materials to be removed as provided by Engineer	
	No. of months for site formation (Phase B to D), m		4.5	Total duration of "removal of surcharge" of concerned site formation works.	
	No. of working days per month, d		25	From Project Engineer	
No. of working hours per day, h	10		From Project Engineer (working hours = 0800 hr to 1800 hr)		
Average hourly output (m ³ /hr), O1	93.33		= Q/(m*d*h)		
Average hourly output (Mg/hr), O2	233.33		= O1 x 2.5Mg/m ³ . Assuming the truck capacity of 6m ³ and 15 tons (i.e. soil density of 2.5 Mg/m ³).		
Site Area (m ²), A ***	44000		-		
Calculated emission rate (unmitigated) (g/m²/s)	3.68E-05		= (O2 x (E x 1000)/ A)/(60*60)		
% of dust suppression #	90.0%		for watering 8 times per day #		
Calculated emission rate (mitigated) (g/m²/s)	3.68E-06				

**Directly Extracted from Appendix 3-3 of the Approved EIA Report
of the "Yau Mei Site" Project (AEIAR-189/2015)**

Type of Work	Type of Emission Source	Parameter	Value	Remark	
	(4) Earth Handling/ Loading, Unloading, and stockpiling (day-time only)	Eqn.: $E = k \times (0.0016) \times ((U/2.2)^{1.3} / (M/2)^{1.4})$		USEPA AP-42, S13.2.4, 11/06 ed. *	
		Particle size multiplier, k	0.35	particle size multiplier for particle size of 10 µm	
		Mean wind speed (m/s), U	1.85	Based on year 2010 average wind speed recorded at Wetland Park Station of Hong Kong Observatory.	
		Material moisture content (%), M	2.2	Pls. refer to Works Item no. 2 above	
		Calculated Emission Factor (kg/Mg), E	0.00039	$E = k \times (0.0016) \times ((U/2.2)^{1.3} / (M/2)^{1.4})$	
		Total quantity of materials involved (m ³), Q	105000	The total amount of concerned surcharge materials to be removed as provided by Engineer	
		No. of months for site formation, m	4.5	Total duration of "removal of surcharge" of concerned site formation works.	
		No. of working days per month, d	25	From Project Engineer	
		No. of working hours per day, h	10	From Project Engineer (working hours = 0800 hr to 1800 hr)	
		Average hourly output (m ³ /hr), O1	93.33	= Q/(m*d*h)	
		Average hourly output (Mg/hr), O2	233.33	= O1 x 2.5Mg/m ³ . Assuming the truck capacity of 6m ³ and 15 tons (i.e. soil density of 2.5 Mg/m ³).	
		Site Area (m ²), A ***	44000	-	
	Calculated emission rate (unmitigated) (g/m ² /s)	5.74E-07	= (O2 x (E x 1000)/ A)/(60*60)		
	% of dust suppression #	90.0%	for watering 8 times per day #		
	Calculated emission rate (mitigated) (g/m ² /s)	5.74E-08			
	Total Emission for "Cut and Cover" (= (2) + (3) + (4))	Total Emission rate, g/m²/s (Unmitigated) (day-time only)	7.88E-05	Calculated total emission factor for "Cut and Cover".	
		Total Emission rate, g/m²/s (mitigated) (day-time only)	7.88E-06	Calculated total emission factor for "Cut and Cover" ###.	
	Vehicle movement on Haul Road	(5) Paved Haul Road (day-time only)	Eqn.: $E = k \times (sL)^{0.91} \times (W)^{1.02}$		USEPA AP-42, S13.2.1, 11/06 ed.
			Particle size multiplier (g/VKT), k	0.62	USEPA AP-42, S13.2.1, 11/06 ed., Table 13.2.1-1 for PM-10.
			Road surface silt loading (g/m ²), sL	14	To represent the worst case scenario, the highest silt loading within the range of typical values specified for quarry operation in the USEPA AP-42, S13.2.1, 11/06 ed., Table 13.2.1-3, is adopted. **
			Mean vehicle weight (tons), W	16	The average weight of the empty truck and full load truck.
			Calculated Emission Factor (g/VKT), E1	115.76	$E = k \times (sL)^{0.91} \times (W)^{1.02}$
Calculated emission factor (g/v-m), E2			0.116	= E1/1000	
Average no. of trucks (veh./hr), T			10	Estimated maximum no. of trucks per hour from Engineer	
Calculated emission rate (unmitigated), g/m/s			3.22E-04	= E2*(T/60*60)	
% of dust suppression #			90.0%	for watering 8 times per day #	
Calculated emission rate (mitigated), g/m/s			3.22E-05		

Remark:

Please refer to Appendix 3-9 for calculation of dust suppression efficiency.

Due to the phased construction area, only limited space and construction plants will be available for construction in any one time. Thus, the construction activities under the "Cut and Cover" category that would contribute to dust emissions will unlikely to operate at the same time. In fact, only one of the above activities will operate in any one time. However, to be conservative, air quality impacts due to simultaneous construction of these activities has been taken into account in the assessment.

* The equation recommended for concerned particular construction activity as per Section 13.2.3 of USEPA AP-42 regarding heavy construction operation.

** The concerned construction activity of this Project during site formation stage will involve earth movement activities and transportation of excavated/ fill materials, etc. The nature of these activities is similar to that of quarry operation. Thus, the typical silt loading within the range of typical values from quarry site, as stipulated in USEPA AP-42, Table 13.2.1-3, S13.2.1, 11/06 ed., is adopted in the above equation. The reported highest silt loading value has been used in this exercise for worst case scenario. It is noted that similar assumption has also been adopted for paved construction haul road in the approved EIA report, Appendix F of the "EIA-032/1999 - East Rail Extension Hung Hom to Tsim Sha Tsui - Environmental Impact Assessment".

*** Total site area of Phases B to D as well as buffer planting area along its edge in adjacent to the WRA, is taken as 4.4ha.

@ Based on conservative ratio reported in literature. Please refer to Appendix 3-10 for the justification.

*Annex 2
(in Appendix 3-11)*

*Information of Predicted TSP, RSP and FSP Concentrations Due
to Planned “Yau Mei Site” project
(Directly Extracted from the Approved “Yau Mei Site “ EIA Report)*

Annex 2 Calculated Pollutants Levels for Planned “Yau Mei Site” project
(Directly Extracted from Section 3.10 of the Approved EIA Report of “Yau Mei Site’ project)

The predicted mitigated hourly average TSP concentrations, as well as daily average and annual average RSP and FSP concentrations due to construction of the planned “Yau Mei Site” project are reproduced and presented in Tables 1 to 5 below.

Table 1 Predicted Maximum Hourly TSP Concentrations (Mitigated Scenario)

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	TSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A01	Fairview Park	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	15 / 14 / 14
A01A	Fairview Park	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	17 / 17 / 16
A02	Fairview Park	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	15 / 14 / 14
A02A	Fairview Park	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	16 / 15 / 14
A03	Fairview Park	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	26 / 25 / 24
A04	Fairview Park	4.3	1.5 / 4.5 / 7.5	164 / 164 / 164	30 / 30 / 28
A05	Fairview Park	4.2	1.5 / 4.5 / 7.5	164 / 164 / 164	29 / 28 / 26
A05A	Fairview Park	4.2	1.5 / 4.5 / 7.5	164 / 164 / 164	31 / 28 / 25
A05B	Fairview Park	4.2	1.5 / 4.5 / 7.5	164 / 164 / 164	39 / 36 / 32
A06	Fairview Park	4.2	1.5 / 4.5 / 7.5	164 / 164 / 164	66 / 55 / 45
A06A	Fairview Park	4.2	1.5 / 4.5 / 7.5	164 / 164 / 164	56 / 49 / 37
A07	Yau Mei San Tsuen village house	3.1	1.5 / 4.5 / 7.5	295 / 215 / 164	212 / 132 / 84
A08	Chuk Yuen Tsuen village house	2.3	1.5 / 4.5 / 7.5	164 / 164 / 164	47 / 44 / 38
A09	Chuk Yuen Tsuen village house	3.5	1.5 / 4.5 / 7.5	165 / 165 / 165	42 / 40 / 35
A10	Bethel High School	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	24 / 24 / 23
A10A	Bethel High School	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	21 / 21 / 20
A11	Helene Terrace	4.5	1.5 / 4.5 / 7.5	164 / 164 / 164	10 / 10 / 10
A12	Villa Camilla	6.5	1.5 / 4.5 / 7.5	164 / 164 / 164	17 / 17 / 16
A13	Fairview Park	4.6	1.5 / 4.5 / 7.5	164 / 164 / 164	15 / 15 / 14
A14	Wong Chan Sook Ying Memorial School	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	13 / 13 / 12
A15	Man Yuen Tsuen village house	4.1	1.5 / 4.5 / 7.5	164 / 164 / 164	9 / 9 / 9
A16	Fairview Park	4.2	1.5 / 4.5 / 7.5	218 / 164 / 164	184 / 107 / 55
A16A	Fairview Park	4.2	1.5 / 4.5 / 7.5	185 / 175 / 164	134 / 100 / 58
A17	Palm Springs	5.7	1.5 / 4.5 / 7.5	164 / 164 / 164	50 / 44 / 33
A18	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	219 / 208 / 192	114 / 90 / 58
A19	Chuk Yuen Tsuen village house	3.3	1.5 / 4.5 / 7.5	164 / 164 / 164	31 / 30 / 28

Annex 2 in Appendix 3-11

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	TSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A20	Hang Fook Garden	4.2	1.5 / 4.5 / 7.5	164 / 164 / 164	18 / 18 / 17
A21	Ha San Wai village house	4.2	1.5 / 4.5 / 7.5	164 / 164 / 164	16 / 16 / 16
A22	Ha San Wai village house	3.5	1.5 / 4.5 / 7.5	164 / 164 / 164	16 / 16 / 16
A23	Yau Mei San Tsuen village house	3.6	1.5 / 4.5 / 7.5	164 / 164 / 164	48 / 43 / 37
A24	Christian Ministry Institute	3.5	1.5 / 4.5 / 7.5	164 / 164 / 164	44 / 43 / 39
A25	Royal Palms	4.9	1.5 / 4.5 / 7.5	200 / 196 / 188	69 / 61 / 49
A26	Hong Chi Morninglight School Yuen Long	4.4	1.5 / 4.5 / 7.5	164 / 164 / 164	55 / 53 / 49
A27	Existing village house	4.5	1.5 / 4.5 / 7.5	164 / 164 / 164	17 / 17 / 17
A28	Fairview Park	4.3	1.5 / 4.5 / 7.5	164 / 164 / 164	33 / 31 / 28
A29	Fairview Park	4.3	1.5 / 4.5 / 7.5	164 / 164 / 164	37 / 35 / 30
A30	Fairview Park	4.5	1.5 / 4.5 / 7.5	164 / 164 / 164	28 / 26 / 24
A31	Fairview Park	3.9	1.5 / 4.5 / 7.5	181 / 164 / 164	123 / 103 / 73
A32	A Restaurant near Helene Terrace	4.5	1.5 / 4.5 / 7.5	164 / 164 / 164	10 / 10 / 10
A33	Fairview Park	3.9	1.5 / 4.5 / 7.5	177 / 164 / 164	132 / 101 / 61
A34	Palm Springs	5.2	1.5 / 4.5 / 7.5	164 / 164 / 164	43 / 42 / 40
A35	Palm Springs	5	1.5 / 4.5 / 7.5	177 / 173 / 167	89 / 79 / 62
A36	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	208 / 190 / 178	153 / 94 / 67
A1Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	179 / 169 / 165	77 / 67 / 56
A2Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	164 / 164 / 164	40 / 39 / 36
A3Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	164 / 164 / 164	121 / 72 / 60
A4Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	164 / 164 / 164	29 / 28 / 27
A5Pa	Planned "Kam Pok Road Site"	6.5	1.5 / 4.5 / 7.5	N/A	N/A
V01	Planned NT exempted houses	3	1.5 / 4.5 / 7.5	164 / 164 / 164	35 / 34 / 32
V02	Planned "V" zone	2.4	1.5 / 4.5 / 7.5	169 / 168 / 168	90 / 77 / 58
V03	Planned "V" zone	3	1.5 / 4.5 / 7.5	164 / 164 / 164	27 / 27 / 26
V04	Planned "RD" zone	4.8	1.5 / 4.5 / 7.5	164 / 164 / 164	10 / 10 / 10
Max. Conc.			-	295	212
Criteria			-	500	500

Remark: * Concentration due to contribution of Project Site

** The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution.

N/A - Not applicable in this cumulative impact assessment.

Table 2 Predicted Daily Average RSP Concentrations (Mitigated Scenario)

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	RSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A01	Fairview Park	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A01A	Fairview Park	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A02	Fairview Park	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A02A	Fairview Park	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A03	Fairview Park	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A04	Fairview Park	4.3	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A05	Fairview Park	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	2 / 2 / 1
A05A	Fairview Park	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	2 / 1 / 1
A05B	Fairview Park	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	2 / 2 / 1
A06	Fairview Park	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	4 / 3 / 3
A06A	Fairview Park	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	4 / 3 / 2
A07	Yau Mei San Tsuen village house	3.1	1.5 / 4.5 / 7.5	125 / 124 / 124	6 / 5 / 3
A08	Chuk Yuen Tsuen village house	2.3	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A09	Chuk Yuen Tsuen village house	3.5	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A10	Bethel High School	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A10A	Bethel High School	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A11	Helene Terrace	4.5	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A12	Villa Camilla	6.5	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A13	Fairview Park	4.6	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A14	Wong Chan Sook Ying Memorial School	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A15	Man Yuen Tsuen village house	4.1	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A16	Fairview Park	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	9 / 6 / 3
A16A	Fairview Park	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	10 / 5 / 3
A17	Palm Springs	5.7	1.5 / 4.5 / 7.5	122 / 122 / 122	3 / 3 / 2
A18	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	124 / 123 / 123	4 / 3 / 2
A19	Chuk Yuen Tsuen village house	3.3	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 0 / 0
A20	Hang Fook Garden	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A21	Ha San Wai village house	4.2	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A22	Ha San Wai village house	3.5	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A23	Yau Mei San Tsuen village house	3.6	1.5 / 4.5 / 7.5	123 / 123 / 123	2 / 2 / 2
A24	Christian Ministry Institute	3.5	1.5 / 4.5 / 7.5	123 / 123 / 123	1 / 1 / 1
A25	Royal Palms	4.9	1.5 / 4.5 / 7.5	123 / 123 / 123	2 / 2 / 1

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	RSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A26	Hong Chi Morninglight School Yuen Long	4.4	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A27	Existing village house	4.5	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A28	Fairview Park	4.3	1.5 / 4.5 / 7.5	122 / 122 / 122	2 / 2 / 2
A29	Fairview Park	4.3	1.5 / 4.5 / 7.5	122 / 122 / 122	3 / 2 / 2
A30	Fairview Park	4.5	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A31	Fairview Park	3.9	1.5 / 4.5 / 7.5	122 / 122 / 122	7 / 4 / 3
A32	A Restaurant near Helene Terrace	4.5	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
A33	Fairview Park	3.9	1.5 / 4.5 / 7.5	122 / 122 / 122	9 / 5 / 4
A34	Palm Springs	5.2	1.5 / 4.5 / 7.5	122 / 122 / 122	2 / 2 / 1
A35	Palm Springs	5	1.5 / 4.5 / 7.5	122 / 122 / 122	4 / 3 / 3
A36	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	125 / 124 / 123	6 / 4 / 3
A1Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	122 / 122 / 122	4 / 3 / 2
A2Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A3Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	122 / 122 / 122	10 / 4 / 3
A4Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
A5Pa	Planned Kam Pok Road Site	6.5	1.5 / 4.5 / 7.5	N/A	N/A
V01	Planned NT exempted houses	3	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
V02	Planned "V" zone	2.4	1.5 / 4.5 / 7.5	122 / 122 / 122	2 / 2 / 1
V03	Planned "V" zone	3	1.5 / 4.5 / 7.5	122 / 122 / 122	1 / 1 / 1
V04	Planned "RD" zone	4.8	1.5 / 4.5 / 7.5	122 / 122 / 122	0 / 0 / 0
Max. Conc.			-	125	10
No. of exceedance @				3	3
Criteria			-	100 (no. of exceedance allowed <= 9)	

Remark: The above results are based on the 1st highest daily average concentrations.

* Concentration due to contribution of Project Site

** The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution.

@ Total no. of exceedance based on the calculated cumulative concentration.

N/A - Not applicable in this cumulative impact assessment

Table 3 Predicted Daily Average FSP Concentrations (Mitigated Scenario)

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	FSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A01	Fairview Park	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A01A	Fairview Park	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A02	Fairview Park	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A02A	Fairview Park	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A03	Fairview Park	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A04	Fairview Park	4.3	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A05	Fairview Park	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 0 / 0
A05A	Fairview Park	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A05B	Fairview Park	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 1 / 0
A06	Fairview Park	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 1 / 1
A06A	Fairview Park	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 1 / 1
A07	Yau Mei San Tsuen village house	3.1	1.5 / 4.5 / 7.5	92 / 92 / 92	2 / 1 / 1
A08	Chuk Yuen Tsuen village house	2.3	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A09	Chuk Yuen Tsuen village house	3.5	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A10	Bethel High School	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A10A	Bethel High School	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A11	Helene Terrace	4.5	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A12	Villa Camilla	6.5	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A13	Fairview Park	4.6	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A14	Wong Chan Sook Ying Memorial School	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A15	Man Yuen Tsuen village house	4.1	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A16	Fairview Park	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	3 / 2 / 1
A16A	Fairview Park	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	3 / 2 / 1
A17	Palm Springs	5.7	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 1 / 1
A18	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	92 / 92 / 92	1 / 1 / 1
A19	Chuk Yuen Tsuen village house	3.3	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A20	Hang Fook Garden	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A21	Ha San Wai village house	4.2	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A22	Ha San Wai village house	3.5	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A23	Yau Mei San Tsuen village house	3.6	1.5 / 4.5 / 7.5	92 / 92 / 92	1 / 1 / 0
A24	Christian Ministry Institute	3.5	1.5 / 4.5 / 7.5	92 / 92 / 92	0 / 0 / 0

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	FSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A25	Royal Palms	4.9	1.5 / 4.5 / 7.5	92 / 92 / 92	1 / 1 / 0
A26	Hong Chi Morninglight School Yuen Long	4.4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A27	Existing village house	4.5	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A28	Fairview Park	4.3	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 0 / 0
A29	Fairview Park	4.3	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 1 / 1
A30	Fairview Park	4.5	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A31	Fairview Park	3.9	1.5 / 4.5 / 7.5	91 / 91 / 91	2 / 1 / 1
A32	A Restaurant near Helene Terrace	4.5	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A33	Fairview Park	3.9	1.5 / 4.5 / 7.5	91 / 91 / 91	3 / 1 / 1
A34	Palm Springs	5.2	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 0 / 0
A35	Palm Springs	5	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 1 / 1
A36	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	92 / 92 / 92	2 / 1 / 1
A1Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 1 / 1
A2Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A3Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	91 / 91 / 91	3 / 1 / 1
A4Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
A5Pa	Planned Kam Pok Road Site	6.5	1.5 / 4.5 / 7.5	N/A	N/A
V01	Planned NT exempted houses	3	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
V02	Planned "V" zone	2.4	1.5 / 4.5 / 7.5	91 / 91 / 91	1 / 1 / 0
V03	Planned "V" zone	3	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
V04	Planned "RD" zone	4.8	1.5 / 4.5 / 7.5	91 / 91 / 91	0 / 0 / 0
Max. Conc.			-	92	3
No. of exceedance @				2	2
Criteria			-	75 (no. of exceedance allowed <= 9)	

Remark: The above results are based on the 1st highest daily average concentrations

* Concentration due to contribution of Project Site.

** The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution.

@ Total no. of exceedance based on the calculated cumulative concentration.

N/A - Not applicable in this cumulative impact assessment.

Table 4 Predicted Annual Average RSP Concentrations (Mitigated Scenario)

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	RSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A01	Fairview Park	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0
A01A	Fairview Park	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A02	Fairview Park	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A02A	Fairview Park	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A03	Fairview Park	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A04	Fairview Park	4.3	1.5 / 4.5 / 7.5	43.4 / 43.4 / 43.3	0.1 / 0.1 / 0.1
A05	Fairview Park	4.2	1.5 / 4.5 / 7.5	43.4 / 43.4 / 43.4	0.2 / 0.2 / 0.1
A05A	Fairview Park	4.2	1.5 / 4.5 / 7.5	43.4 / 43.4 / 43.4	0.2 / 0.1 / 0.1
A05B	Fairview Park	4.2	1.5 / 4.5 / 7.5	43.5 / 43.4 / 43.4	0.2 / 0.2 / 0.2
A06	Fairview Park	4.2	1.5 / 4.5 / 7.5	43.7 / 43.6 / 43.5	0.5 / 0.4 / 0.3
A06A	Fairview Park	4.2	1.5 / 4.5 / 7.5	43.6 / 43.6 / 43.5	0.4 / 0.3 / 0.2
A07	Yau Mei San Tsuen village house	3.1	1.5 / 4.5 / 7.5	43.6 / 43.5 / 43.4	0.4 / 0.3 / 0.2
A08	Chuk Yuen Tsuen village house	2.3	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0 / 0
A09	Chuk Yuen Tsuen village house	3.5	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A10	Bethel High School	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A10A	Bethel High School	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A11	Helene Terrace	4.5	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A12	Villa Camilla	6.5	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A13	Fairview Park	4.6	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A14	Wong Chan Sook Ying Memorial School	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A15	Man Yuen Tsuen village house	4.1	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A16	Fairview Park	4.2	1.5 / 4.5 / 7.5	44.3 / 43.9 / 43.6	1.1 / 0.6 / 0.4
A16A	Fairview Park	4.2	1.5 / 4.5 / 7.5	44.2 / 43.8 / 43.6	1 / 0.6 / 0.4
A17	Palm Springs	5.7	1.5 / 4.5 / 7.5	43.5 / 43.4 / 43.4	0.2 / 0.2 / 0.1
A18	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	43.7 / 43.6 / 43.5	0.5 / 0.4 / 0.3
A19	Chuk Yuen Tsuen village house	3.3	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A20	Hang Fook Garden	4.2	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A21	Ha San Wai village house	4.2	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A22	Ha San Wai village house	3.5	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A23	Yau Mei San Tsuen village house	3.6	1.5 / 4.5 / 7.5	43.4 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A24	Christian Ministry Institute	3.5	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A25	Royal Palms	4.9	1.5 / 4.5 / 7.5	43.5 / 43.5 / 43.4	0.3 / 0.2 / 0.2

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	RSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A26	Hong Chi Morninglight School Yuen Long	4.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A27	Existing village house	4.5	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A28	Fairview Park	4.3	1.5 / 4.5 / 7.5	43.5 / 43.4 / 43.4	0.2 / 0.2 / 0.2
A29	Fairview Park	4.3	1.5 / 4.5 / 7.5	43.5 / 43.4 / 43.4	0.2 / 0.2 / 0.2
A30	Fairview Park	4.5	1.5 / 4.5 / 7.5	43.4 / 43.4 / 43.4	0.1 / 0.1 / 0.1
A31	Fairview Park	3.9	1.5 / 4.5 / 7.5	43.6 / 43.6 / 43.5	0.4 / 0.3 / 0.2
A32	A Restaurant near Helene Terrace	4.5	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
A33	Fairview Park	3.9	1.5 / 4.5 / 7.5	43.9 / 43.7 / 43.5	0.6 / 0.4 / 0.3
A34	Palm Springs	5.2	1.5 / 4.5 / 7.5	43.4 / 43.4 / 43.3	0.1 / 0.1 / 0.1
A35	Palm Springs	5	1.5 / 4.5 / 7.5	43.6 / 43.5 / 43.5	0.3 / 0.3 / 0.2
A36	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	44 / 43.8 / 43.6	0.8 / 0.6 / 0.4
A1Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	43.5 / 43.4 / 43.4	0.2 / 0.2 / 0.1
A2Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A3Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	43.9 / 43.7 / 43.6	0.7 / 0.5 / 0.3
A4Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
A5Pa	Planned Kam Pok Road Site	6.5	1.5 / 4.5 / 7.5	N/A	N/A
V01	Planned NT exempted houses	3	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
V02	Planned "V" zone	2.4	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0.1 / 0.1 / 0.1
V03	Planned "V" zone	3	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
V04	Planned "RD" zone	4.8	1.5 / 4.5 / 7.5	43.3 / 43.3 / 43.3	0 / 0 / 0
Max. Conc.			-	44.3	1.1
Criteria			-	50	50

Remark: * Concentration due to contribution of Project Site.

** The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution.

N/A - Not applicable in this cumulative impact assessment.

Table 5 Predicted Annual Average FSP Concentrations (Mitigated Scenario)

ASR No.	Description	Ground Level, mPD	Height Above Ground, m	FSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A01	Fairview Park	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A01A	Fairview Park	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A02	Fairview Park	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A02A	Fairview Park	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A03	Fairview Park	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A04	Fairview Park	4.3	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A05	Fairview Park	4.2	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.7	0.1 / 0 / 0
A05A	Fairview Park	4.2	1.5 / 4.5 / 7.5	30.8 / 30.7 / 30.7	0 / 0 / 0
A05B	Fairview Park	4.2	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0
A06	Fairview Park	4.2	1.5 / 4.5 / 7.5	30.9 / 30.8 / 30.8	0.2 / 0.1 / 0.1
A06A	Fairview Park	4.2	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0.1
A07	Yau Mei San Tsuen village house	3.1	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0.1
A08	Chuk Yuen Tsuen village house	2.3	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A09	Chuk Yuen Tsuen village house	3.5	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A10	Bethel High School	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A10A	Bethel High School	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A11	Helene Terrace	4.5	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A12	Villa Camilla	6.5	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A13	Fairview Park	4.6	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A14	Wong Chan Sook Ying Memorial School	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A15	Man Yuen Tsuen village house	4.1	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A16	Fairview Park	4.2	1.5 / 4.5 / 7.5	31 / 30.9 / 30.8	0.3 / 0.2 / 0.1
A16A	Fairview Park	4.2	1.5 / 4.5 / 7.5	31 / 30.9 / 30.8	0.3 / 0.2 / 0.1
A17	Palm Springs	5.7	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.7	0.1 / 0.1 / 0
A18	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0.1
A19	Chuk Yuen Tsuen village house	3.3	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A20	Hang Fook Garden	4.2	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A21	Ha San Wai village house	4.2	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A22	Ha San Wai village house	3.5	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A23	Yau Mei San Tsuen village house	3.6	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A24	Christian Ministry Institute	3.5	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0

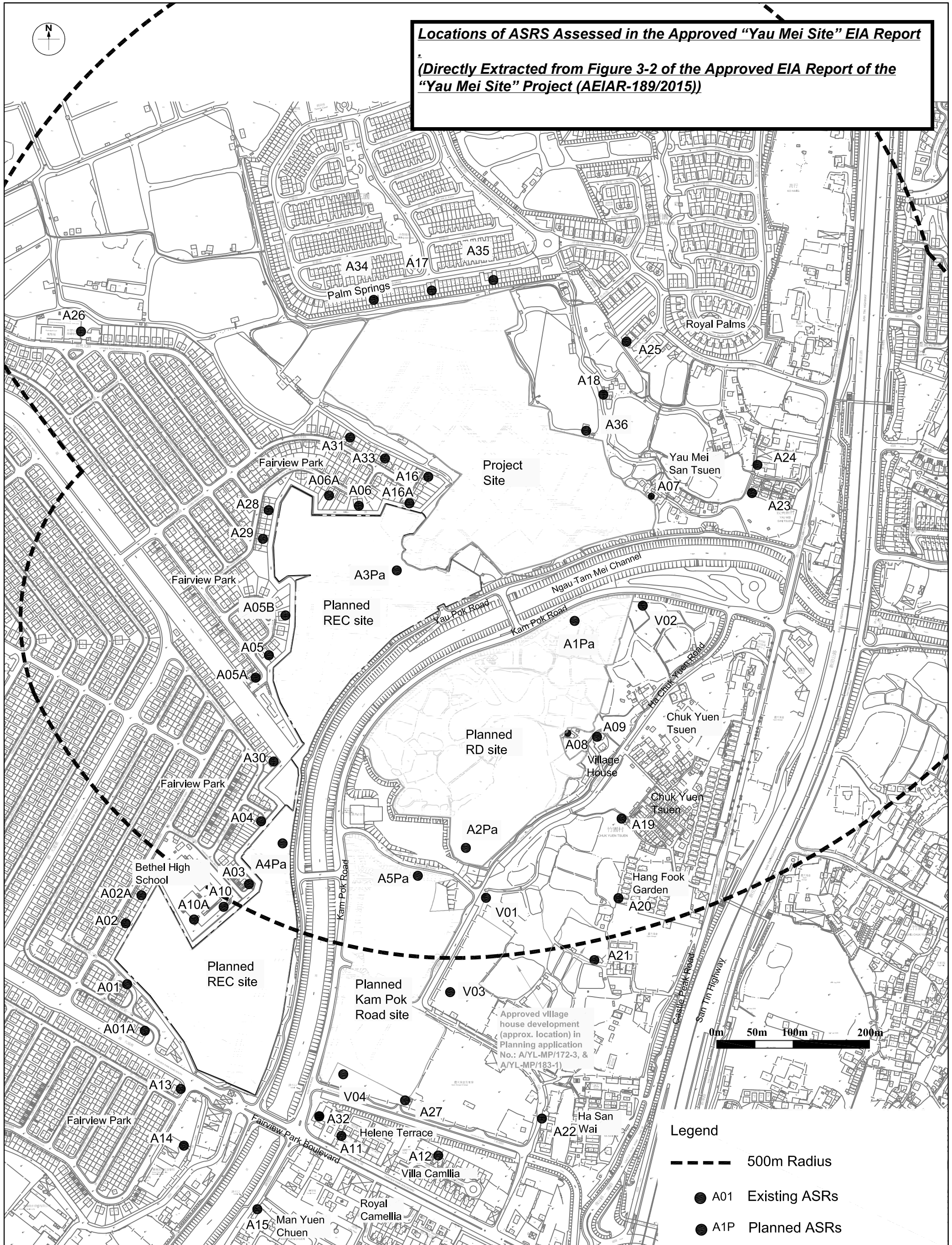
ASR No.	Description	Ground Level, mPD	Height Above Ground, m	FSP Concentration ($\mu\text{g}/\text{m}^3$)	
				With Background **	Without Background *
A25	Royal Palms	4.9	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0.1
A26	Hong Chi Morninglight School Yuen Long	4.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A27	Existing village house	4.5	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A28	Fairview Park	4.3	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0
A29	Fairview Park	4.3	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0
A30	Fairview Park	4.5	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A31	Fairview Park	3.9	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0.1
A32	A Restaurant near Helene Terrace	4.5	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A33	Fairview Park	3.9	1.5 / 4.5 / 7.5	30.9 / 30.8 / 30.8	0.2 / 0.1 / 0.1
A34	Palm Springs	5.2	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A35	Palm Springs	5	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.8	0.1 / 0.1 / 0.1
A36	Yau Mei San Tsuen village house	3.5	1.5 / 4.5 / 7.5	30.9 / 30.9 / 30.8	0.2 / 0.2 / 0.1
A1Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	30.8 / 30.8 / 30.7	0.1 / 0.1 / 0
A2Pa	Planned RD Site	3	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A3Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	30.9 / 30.8 / 30.8	0.2 / 0.1 / 0.1
A4Pa	Planned REC Site	4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
A5Pa	Planned Kam Pok Road Site	6.5	1.5 / 4.5 / 7.5	N/A	N/A
V01	Planned NT exempted houses	3	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
V02	Planned "V" zone	2.4	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
V03	Planned "V" zone	3	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
V04	Planned "RD" zone	4.8	1.5 / 4.5 / 7.5	30.7 / 30.7 / 30.7	0 / 0 / 0
Max. Conc.			-	31.0	0.3
Criteria			-	35	35

Remark: * Concentration due to contribution of Project Site.

** The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution.

N/A - Not applicable in this cumulative impact assessment.

Locations of ASRS Assessed in the Approved "Yau Mei Site" EIA Report
 (Directly Extracted from Figure 3-2 of the Approved EIA Report of the "Yau Mei Site" Project (AEIAR-189/2015))



- Legend**
- 500m Radius
 - A01 Existing ASRs
 - A1P Planned ASRs

<p>Figure: 3-2</p> <p>Title: Representative ASRs Selected for Construction Phase Air Quality Assessment</p> <p>Project: Comprehensive Development and Wetland Protection near Yau Mei San Tsuen</p>	ENVIRON
	Drawn by: HN
	Checked by: TC
	Rev.: 3.2
	Date: Aug 2014

*Annex 3
(in Appendix 3-11)*

*Calculated Cumulative TSP, RSP and FSP Concentrations Due to
Concurrent Construction with “Yau Mei Site”
project*

Annex 3-1 Summary Table of Cumulative Highest Hourly TSP Level (Mitigated Scenario)

ASR	X	Y	Z	Height above ground	Due to this Project Only (extracted from Appendix 3-6)		Due to Cumulative Construction with planned "Yau Mei Site" Project	
					Max. Hourly TSP (With Bkg. Level) *	Max. Hourly TSP (W/o Bkg.)	Max. Hourly TSP (With Bkg. Level) *	Max. Hourly TSP (W/o Bkg.)
					With Bkg. Level	Without Bkg. level	With Bkg. Level	Without Bkg. level
A01	823101.12	837242.4	4.4	1.5	164	35	164	35
A01A	823124.28	837181.3	4.4	1.5	164	32	164	32
A02	823092.84	837314	4.4	1.5	164	28	164	28
A02A	823119.86	837359.1	4.4	1.5	164	35	164	35
A03	823260.81	837373.7	4.4	1.5	164	61	164	61
A04	823276.81	837456.1	4.3	1.5	164	53	164	53
A05	823287.12	837673.9	4.2	1.5	164	17	164	29
A05A	823269.63	837644.5	4.2	1.5	164	24	164	31
A05B	823308.73	837726.2	4.2	1.5	164	15	164	39
A06	823405	837870	4.2	1.5	164	21	164	66
A06A	823365.92	837883.6	4.2	1.5	164	15	164	56
A07	823788.62	837882.5	3.1	1.5	164	8	295	212
A08	823679.12	837571.7	2.3	1.5	164	16	164	47
A09	823717.31	837567	3.5	1.5	164	19	165	42
A10	823227.62	837343.9	4.4	1.5	164	54	164	54
A10A	823188.8	837327.3	4.4	1.5	164	46	164	46
A11	823382.12	837043.2	4.5	1.5	171	88	171	88
A12	823509.19	837017.6	6.5	1.5	166	56	166	58
A13	823171.38	837105	4.6	1.5	164	38	164	38
A14	823175.5	837030.5	4.4	1.5	164	45	164	45
A15	823271.81	836947.2	4.1	1.5	164	36	164	36
A16	823496	837908.2	4.2	1.5	164	10	218	184
A16A	823470.21	837871.6	4.2	1.5	164	11	185	134
A17	823500.62	838152.4	5.7	1.5	164	6	164	56
A18	823725.62	838015.9	3.5	1.5	164	10	219	114
A19	823749.5	837459.6	3.3	1.5	164	26	164	31
A20	823745.38	837355.3	4.2	1.5	164	33	164	33
A21	823713.88	837274	4.2	1.5	164	36	164	36
A22	823645.12	837066.1	3.5	1.5	165	49	165	49
A23	823920.62	837886.7	3.6	1.5	164	9	164	48
A24	823927.69	837923.6	3.5	1.5	164	9	164	44
A25	823756	838085.2	4.9	1.5	164	10	200	69
A26	823040.62	838098.6	4.4	1.5	164	9	164	55
A27	823465.59	837089.9	4.5	1.5	316	226	316	227
A28	823286.57	837864.2	4.3	1.5	164	10	164	33
A29	823279.17	837826.6	4.3	1.5	164	11	164	37
A30	823293.2	837534.5	4.5	1.5	164	44	164	44
A31	823393.53	837959.7	3.9	1.5	164	14	181	123
A32	823353.02	837069.1	4.5	1.5	166	89	166	89
A33	823439.27	837932.1	3.9	1.5	164	19	177	132
A34	823424.53	838140.2	5.2	1.5	164	13	164	43
A35	823581.4	838166.3	5	1.5	164	6	177	94
A36	823703.1	837968.5	3.5	1.5	164	11	208	153
A1Pa	823687.9	837719	3	1.5	166	19	179	80
A2Pa	823545.2	837421.1	3	1.5	176	109	176	109
A3Pa	823454.7	837785.1	4	1.5	164	17	164	121
A4Pa	823304.9	837427.1	4	1.5	213	179	213	179
A5Pa	823602.1	837795.8	4	1.5	164	13	**	**
V01	823571.7	837355.7	3	1.5	168	152	168	152
V02	823780.1	837738.5	2.4	1.5	167	15	169	90
V03	823524.7	837232	3	1.5	227	164	227	164
V04	823384.5	837124.2	4.8	1.5	224	143	224	143
A01	823101.12	837242.4	4.4	4.5	164	31	164	31
A01A	823124.28	837181.3	4.4	4.5	164	30	164	30
A02	823092.84	837314	4.4	4.5	164	26	164	26
A02A	823119.86	837359.1	4.4	4.5	164	31	164	31
A03	823260.81	837373.7	4.4	4.5	164	45	164	45
A04	823276.81	837456.1	4.3	4.5	164	42	164	42
A05	823287.12	837673.9	4.2	4.5	164	16	164	28
A05A	823269.63	837644.5	4.2	4.5	164	23	164	28
A05B	823308.73	837726.2	4.2	4.5	164	14	164	36
A06	823405	837870	4.2	4.5	164	19	164	55
A06A	823365.92	837883.6	4.2	4.5	164	15	164	49
A07	823788.62	837882.5	3.1	4.5	164	8	215	132
A08	823679.12	837571.7	2.3	4.5	164	15	164	44
A09	823717.31	837567	3.5	4.5	164	15	165	40
A10	823227.62	837343.9	4.4	4.5	164	43	164	43
A10A	823188.8	837327.3	4.4	4.5	164	40	164	40
A11	823382.12	837043.2	4.5	4.5	164	72	164	72
A12	823509.19	837017.6	6.5	4.5	166	52	166	54
A13	823171.38	837105	4.6	4.5	164	36	164	36
A14	823175.5	837030.5	4.4	4.5	164	42	164	42
A15	823271.81	836947.2	4.1	4.5	164	34	164	34
A16	823496	837908.2	4.2	4.5	164	10	164	107
A16A	823470.21	837871.6	4.2	4.5	164	11	175	100
A17	823500.62	838152.4	5.7	4.5	164	6	164	49
A18	823725.62	838015.9	3.5	4.5	164	10	208	90
A19	823749.5	837459.6	3.3	4.5	164	24	164	30
A20	823745.38	837355.3	4.2	4.5	164	31	164	31
A21	823713.88	837274	4.2	4.5	164	33	164	33

ASR	X	Y	Z	Height above ground	Max. Hourly TSP (With Bkg. Level) *		Max. Hourly TSP (W/o Bkg.)	
					With Bkg. Level	Without Bkg. level	With Bkg. Level	Without Bkg. level
A22	823645.12	837066.1	3.5	4.5	164	47	164	47
A23	823920.62	837886.7	3.6	4.5	164	9	164	43
A24	823927.69	837923.6	3.5	4.5	164	9	164	43
A25	823756	838085.2	4.9	4.5	164	9	196	61
A26	823040.62	838098.6	4.4	4.5	164	9	164	53
A27	823465.59	837089.9	4.5	4.5	252	163	253	163
A28	823286.57	837864.2	4.3	4.5	164	10	164	31
A29	823279.17	837826.6	4.3	4.5	164	11	164	35
A30	823293.2	837534.5	4.5	4.5	164	42	164	42
A31	823393.53	837959.7	3.9	4.5	164	13	164	103
A32	823353.02	837069.1	4.5	4.5	164	82	164	82
A33	823439.27	837932.1	3.9	4.5	164	18	164	101
A34	823424.53	838140.2	5.2	4.5	164	13	164	42
A35	823581.4	838166.3	5	4.5	164	6	173	83
A36	823703.1	837968.5	3.5	4.5	164	11	190	94
A1Pa	823687.9	837719	3	4.5	166	18	169	67
A2Pa	823545.2	837421.1	3	4.5	167	94	167	94
A3Pa	823454.7	837785.1	4	4.5	164	16	164	72
A4Pa	823304.9	837427.1	4	4.5	164	110	164	110
A5Pa	823602.1	837795.8	4	4.5	164	13	**	**
V01	823571.7	837355.7	3	4.5	164	67	164	67
V02	823780.1	837738.5	2.4	4.5	167	14	168	77
V03	823524.7	837232	3	4.5	175	96	175	96
V04	823384.5	837124.2	4.8	4.5	164	77	164	85
A01	823101.12	837242.4	4.4	7.5	164	25	164	25
A01A	823124.28	837181.3	4.4	7.5	164	27	164	27
A02	823092.84	837314	4.4	7.5	164	24	164	24
A02A	823119.86	837359.1	4.4	7.5	164	24	164	24
A03	823260.81	837373.7	4.4	7.5	164	32	164	32
A04	823276.81	837456.1	4.3	7.5	164	29	164	29
A05	823287.12	837673.9	4.2	7.5	164	15	164	26
A05A	823269.63	837644.5	4.2	7.5	164	22	164	25
A05B	823308.73	837726.2	4.2	7.5	164	14	164	32
A06	823405	837870	4.2	7.5	164	18	164	45
A06A	823365.92	837883.6	4.2	7.5	164	14	164	37
A07	823788.62	837882.5	3.1	7.5	164	7	164	84
A08	823679.12	837571.7	2.3	7.5	164	14	164	38
A09	823717.31	837567	3.5	7.5	164	13	165	35
A10	823227.62	837343.9	4.4	7.5	164	38	164	38
A10A	823188.8	837327.3	4.4	7.5	164	33	164	33
A11	823382.12	837043.2	4.5	7.5	164	48	164	48
A12	823509.19	837017.6	6.5	7.5	165	45	165	46
A13	823171.38	837105	4.6	7.5	164	31	164	31
A14	823175.5	837030.5	4.4	7.5	164	37	164	37
A15	823271.81	836947.2	4.1	7.5	164	30	164	30
A16	823496	837908.2	4.2	7.5	164	10	164	55
A16A	823470.21	837871.6	4.2	7.5	164	10	164	58
A17	823500.62	838152.4	5.7	7.5	164	6	164	40
A18	823725.62	838015.9	3.5	7.5	164	10	192	58
A19	823749.5	837459.6	3.3	7.5	164	21	164	28
A20	823745.38	837355.3	4.2	7.5	164	26	164	26
A21	823713.88	837274	4.2	7.5	164	28	164	28
A22	823645.12	837066.1	3.5	7.5	164	43	164	43
A23	823920.62	837886.7	3.6	7.5	164	9	164	37
A24	823927.69	837923.6	3.5	7.5	164	8	164	39
A25	823756	838085.2	4.9	7.5	164	9	188	49
A26	823040.62	838098.6	4.4	7.5	164	9	164	49
A27	823465.59	837089.9	4.5	7.5	182	92	183	93
A28	823286.57	837864.2	4.3	7.5	164	10	164	28
A29	823279.17	837826.6	4.3	7.5	164	10	164	30
A30	823293.2	837534.5	4.5	7.5	164	38	164	38
A31	823393.53	837959.7	3.9	7.5	164	12	164	73
A32	823353.02	837069.1	4.5	7.5	164	70	164	70
A33	823439.27	837932.1	3.9	7.5	164	16	164	61
A34	823424.53	838140.2	5.2	7.5	164	12	164	40
A35	823581.4	838166.3	5	7.5	164	6	167	66
A36	823703.1	837968.5	3.5	7.5	164	10	178	69
A1Pa	823687.9	837719	3	7.5	165	18	165	56
A2Pa	823545.2	837421.1	3	7.5	165	71	165	71
A3Pa	823454.7	837785.1	4	7.5	164	14	164	60
A4Pa	823304.9	837427.1	4	7.5	164	43	164	43
A5Pa	823602.1	837795.8	4	7.5	164	13	**	**
V01	823571.7	837355.7	3	7.5	164	51	164	51
V02	823780.1	837738.5	2.4	7.5	166	14	168	58
V03	823524.7	837232	3	7.5	164	65	164	65
V04	823384.5	837124.2	4.8	7.5	164	65	164	72
Max. TSP Level, ug/m³					316	226	316	227
Relevant AQO Criteria, ug/m³					500	500	500	500

Remark: * The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output file of PATH model, and added hour-by-hour to the Project contribution in order to calculate the total TSP level.

** The concerned ASR represents planned future ASR within the planned 'Yau Mei Site' Project, which is not considered when calculating the cumulative impact.

Annex 3-2 Summary Table of Cumulative Daily Average RSP Level (Mitigated Scenario)

ASR	X	Y	Z	Height above ground	Due to this Project Only (extracted from Appendix 3-7 of this EIA report)				Due to Cumulative Construction with planned "Yau Mei Site" Project			
					1st Highest Daily RSP (With Bkg. Level) *		10th Highest Daily RSP (With Bkg. Level) *		1st Highest Daily RSP (With Bkg. Level) *		10th Highest Daily RSP (With Bkg. Level) *	
					With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level
A01	823101.12	837242.4	4.4	1.5	122	1	78	1	122	1	85	1
A01A	823124.28	837181.3	4.4	1.5	122	2	78	1	122	2	85	1
A02	823092.84	837314	4.4	1.5	122	1	78	1	122	1	85	1
A02A	823119.86	837359.1	4.4	1.5	122	1	78	1	122	1	85	1
A03	823260.81	837373.7	4.4	1.5	122	2	79	1	122	2	85	1
A04	823276.81	837456.1	4.3	1.5	122	2	78	1	122	2	85	1
A05	823287.12	837673.9	4.2	1.5	122	0	78	0	122	2	85	1
A05A	823269.63	837644.5	4.2	1.5	122	1	78	0	122	2	85	1
A05B	823308.73	837726.2	4.2	1.5	122	0	78	0	122	2	85	1
A06	823405	837870	4.2	1.5	122	0	78	0	122	4	85	3
A06A	823365.92	837883.6	4.2	1.5	122	0	78	0	122	4	85	2
A07	823788.62	837882.5	3.1	1.5	122	0	78	0	125	6	85	3
A08	823679.12	837571.7	2.3	1.5	122	1	78	0	122	1	85	1
A09	823717.31	837567	3.5	1.5	122	1	78	0	122	1	85	1
A10	823227.62	837343.9	4.4	1.5	122	2	78	1	122	2	85	1
A10A	823188.8	837327.3	4.4	1.5	122	1	78	1	122	2	85	1
A11	823382.12	837043.2	4.5	1.5	122	9	79	1	122	9	85	1
A12	823509.19	837017.6	6.5	1.5	122	2	78	0	122	2	85	0
A13	823171.38	837105	4.6	1.5	122	2	78	1	122	2	85	1
A14	823175.5	837030.5	4.4	1.5	122	1	78	1	122	1	85	1
A15	823271.81	836947.2	4.1	1.5	122	3	79	1	122	3	85	1
A16	823496	837908.2	4.2	1.5	122	0	78	0	122	9	85	6
A16A	823470.21	837871.6	4.2	1.5	122	1	78	0	122	10	85	6
A17	823500.62	838152.4	5.7	1.5	122	0	78	0	122	3	85	2
A18	823725.62	838015.9	3.5	1.5	122	0	78	0	124	4	85	2
A19	823749.5	837459.6	3.3	1.5	122	1	78	0	122	1	85	0
A20	823745.38	837355.3	4.2	1.5	122	1	78	0	122	1	85	0
A21	823713.88	837274	4.2	1.5	122	1	78	1	122	1	85	1
A22	823645.12	837066.1	3.5	1.5	122	1	78	0	122	1	85	0
A23	823920.62	837886.7	3.6	1.5	122	0	78	0	123	2	85	1
A24	823927.69	837923.6	3.5	1.5	122	0	78	0	123	1	85	1
A25	823756	838085.2	4.9	1.5	122	0	78	0	123	2	85	1
A26	823040.62	838098.6	4.4	1.5	122	0	78	0	122	1	85	0
A27	823465.59	837089.9	4.5	1.5	122	11	80	2	122	11	85	2
A28	823286.57	837864.2	4.3	1.5	122	0	78	0	122	2	85	1
A29	823279.17	837826.6	4.3	1.5	122	0	78	0	122	3	85	1
A30	823293.2	837534.5	4.5	1.5	122	1	78	0	122	1	85	1
A31	823393.53	837959.7	3.9	1.5	122	0	78	0	122	7	85	3
A32	823353.02	837069.1	4.5	1.5	122	6	79	2	122	6	85	2
A33	823439.27	837932.1	3.9	1.5	122	0	78	0	122	9	85	4
A34	823424.53	838140.2	5.2	1.5	122	0	78	0	122	2	85	1
A35	823581.4	838166.3	5	1.5	122	0	78	0	122	4	85	2
A36	823703.1	837968.5	3.5	1.5	122	0	78	0	125	6	85	4
A1Pa	823687.9	837719	3	1.5	122	0	78	0	122	4	86	2
A2Pa	823545.2	837421.1	3	1.5	124	4	78	2	124	4	85	2
A3Pa	823454.7	837785.1	4	1.5	122	1	78	0	122	10	85	4
A4Pa	823304.9	837427.1	4	1.5	122	5	78	1	122	5	85	1
A5Pa	823602.1	837795.8	4	1.5	122	1	78	0	122	0	85	0
V01	823571.7	837355.7	3	1.5	124	4	79	2	124	4	85	2
V02	823780.1	837738.5	2.4	1.5	122	0	78	0	122	2	85	1
V03	823524.7	837232	3	1.5	122	6	78	3	122	6	85	3
V04	823384.5	837124.2	4.8	1.5	122	10	79	4	122	10	85	4
A01	823101.12	837242.4	4.4	4.5	122	1	78	1	122	1	85	1
A01A	823124.28	837181.3	4.4	4.5	122	2	78	1	122	2	85	1
A02	823092.84	837314	4.4	4.5	122	1	78	0	122	1	85	1
A02A	823119.86	837359.1	4.4	4.5	122	1	78	0	122	1	85	1
A03	823260.81	837373.7	4.4	4.5	122	1	78	1	122	2	85	1
A04	823276.81	837456.1	4.3	4.5	122	2	78	1	122	2	85	1
A05	823287.12	837673.9	4.2	4.5	122	0	78	0	122	2	85	1
A05A	823269.63	837644.5	4.2	4.5	122	1	78	0	122	1	85	1
A05B	823308.73	837726.2	4.2	4.5	122	0	78	0	122	2	85	1
A06	823405	837870	4.2	4.5	122	0	78	0	122	3	85	2
A06A	823365.92	837883.6	4.2	4.5	122	0	78	0	122	3	85	2
A07	823788.62	837882.5	3.1	4.5	122	0	78	0	124	5	85	2
A08	823679.12	837571.7	2.3	4.5	122	1	78	0	122	1	85	1
A09	823717.31	837567	3.5	4.5	122	1	78	0	122	1	85	0
A10	823227.62	837343.9	4.4	4.5	122	2	78	1	122	2	85	1
A10A	823188.8	837327.3	4.4	4.5	122	1	78	1	122	1	85	1
A11	823382.12	837043.2	4.5	4.5	122	7	79	1	122	7	85	1
A12	823509.19	837017.6	6.5	4.5	122	2	78	0	122	2	85	0
A13	823171.38	837105	4.6	4.5	122	1	78	1	122	1	85	1
A14	823175.5	837030.5	4.4	4.5	122	1	78	1	122	1	85	1
A15	823271.81	836947.2	4.1	4.5	122	2	79	1	122	2	85	1
A16	823496	837908.2	4.2	4.5	122	0	78	0	122	6	85	3
A16A	823470.21	837871.6	4.2	4.5	122	1	78	0	122	5	85	3
A17	823500.62	838152.4	5.7	4.5	122	0	78	0	122	3	85	1
A18	823725.62	838015.9	3.5	4.5	122	0	78	0	123	3	85	2
A19	823749.5	837459.6	3.3	4.5	122	1	78	0	122	1	85	0
A20	823745.38	837355.3	4.2	4.5	122	1	78	0	122	1	85	0
A21	823713.88	837274	4.2	4.5	122	1	78	1	122	1	85	1
A22	823645.12	837066.1	3.5	4.5	122	1	78	0	122	1	85	0
A23	823920.62	837886.7	3.6	4.5	122	0	78	0	123	2	85	1
A24	823927.69	837923.6	3.5	4.5	122	0	78	0	123	1	85	1
A25	823756	838085.2	4.9	4.5	122	0	78	0	123	2	85	1
A26	823040.62	838098.6	4.4	4.5	122	0	78	0	122	1	85	0
A27	823465.59	837089.9	4.5	4.5	122	5	79	1	122	5	85	1
A28	823286.57	837864.2	4.3	4.5	122	0	78	0	122	2	85	1
A29	823279.17	837826.6	4.3	4.5	122	0	78	0	122	2	85	1
A30	823293.2	837534.5	4.5	4.5	122	1	78	0	122	1	85	1
A31	823393.53	837959.7	3.9	4.5	122	0	78	0	122	4	85	2
A32	823353.02	837069.1	4.5	4.5	122	5	79	1	122	5	85	1
A33	823439.27	837932.1	3.9	4.5	122	0	78	0	122	5	85	3
A34	823424.53	838140.2	5.2	4.5	122	0	78	0	122	2	85	1
A35	823581.4	838166.3	5	4.5	122	0	78	0	122	3	85	2
A36	823703.1	837968.5	3.5	4.5	122	0	78	0	124	4	85	3
A1Pa	823687.9	837719	3	4.5	122	0	78	0	122	3	85	1
A2Pa	823545.2	837421.1	3	4.5	123	3	78	1	123	3	85	1
A3Pa	823454.7	837785.1	4	4.5	122	1	78	0	122	4	85	3
A4Pa	823304.9	837427.1	4	4.5	122	3	78	1	122	3	85	1
A5Pa	823602.1	837795.8	4	4.5	122	1	78	0	122	0	85	0
V01	823571.7	837355.7	3	4.5	123	2	78	1	123	2	85	1
V02	823780.1	837738.5	2.4	4.5	122	0	78	0	122	2	85	1
V03	823524.7	837232	3	4.5	122	3	78	2	122	3	85	2
V04	823384.5	837124.2	4.8	4.5	122	5	79	2	122	5	85	2
A01	823101.12	837242.4	4.4	7.5	122	1	78	0	122	1	85	1
A01A	823124.28	837181.3	4.4	7.5	122	1	78	1	122	1	85	1
A02	823092.84	837314	4.4	7.5	122	1	78	0	122	1	85	1
A02A	823119.86	837359.1	4.4	7.5	122	1	78	0	122	1	85	1
A03	823260.81	837373.7	4.4	7.5	122	1	78	1	122	1	85	1
A04	823276.81	837456.1	4.3	7.5	122	1	78	0	122	1	85	1

ASR	X	Y	Z	Height above ground	1st Highest Daily RSP (With Bkg. Level) *		10th Highest Daily RSP (With Bkg. Level) *		1st Highest Daily RSP (With Bkg. Level) *		10th Highest Daily RSP (With Bkg. Level) *	
					With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level
A05	823287.12	837673.9	4.2	7.5	122	0	78	0	122	1	85	1
A05A	823269.63	837644.5	4.2	7.5	122	0	78	0	122	1	85	1
A05B	823308.73	837726.2	4.2	7.5	122	0	78	0	122	1	85	1
A06	823405	837870	4.2	7.5	122	0	78	0	122	3	85	2
A06A	823365.92	837883.6	4.2	7.5	122	0	78	0	122	2	85	1
A07	823788.62	837882.5	3.1	7.5	122	0	78	0	124	3	85	2
A08	823679.12	837571.7	2.3	7.5	122	1	78	0	122	1	85	1
A09	823717.31	837567	3.5	7.5	122	1	78	0	122	1	85	0
A10	823227.62	837343.9	4.4	7.5	122	1	78	1	122	1	85	1
A10A	823188.8	837327.3	4.4	7.5	122	1	78	1	122	1	85	1
A11	823382.12	837043.2	4.5	7.5	122	4	79	1	122	4	85	1
A12	823509.19	837017.6	6.5	7.5	122	1	78	0	122	1	85	0
A13	823171.38	837105	4.6	7.5	122	1	78	1	122	1	85	1
A14	823175.5	837030.5	4.4	7.5	122	1	78	1	122	1	85	1
A15	823271.81	836947.2	4.1	7.5	122	2	79	1	122	2	85	1
A16	823496	837908.2	4.2	7.5	122	0	78	0	122	3	85	2
A16A	823470.21	837871.6	4.2	7.5	122	0	78	0	122	3	85	2
A17	823500.62	838152.4	5.7	7.5	122	0	78	0	122	2	85	1
A18	823725.62	838015.9	3.5	7.5	122	0	78	0	123	2	85	2
A19	823749.5	837459.6	3.3	7.5	122	1	78	0	122	1	85	0
A20	823745.38	837355.3	4.2	7.5	122	1	78	0	122	1	85	0
A21	823713.88	837274	4.2	7.5	122	1	78	0	122	1	85	1
A22	823645.12	837066.1	3.5	7.5	122	1	78	0	122	1	85	0
A23	823920.62	837886.7	3.6	7.5	122	0	78	0	123	2	85	1
A24	823927.69	837923.6	3.5	7.5	122	0	78	0	123	1	85	1
A25	823756	838085.2	4.9	7.5	122	0	78	0	123	2	85	1
A26	823040.62	838098.6	4.4	7.5	122	0	78	0	122	1	85	0
A27	823465.59	837089.9	4.5	7.5	122	3	78	0	122	3	85	1
A28	823286.57	837864.2	4.3	7.5	122	0	78	0	122	2	85	1
A29	823279.17	837826.6	4.3	7.5	122	0	78	0	122	2	85	1
A30	823293.2	837534.5	4.5	7.5	122	1	78	0	122	1	85	1
A31	823393.53	837959.7	3.9	7.5	122	0	78	0	122	3	85	2
A32	823353.02	837069.1	4.5	7.5	122	3	79	1	122	3	85	1
A33	823439.27	837932.1	3.9	7.5	122	0	78	0	122	4	85	2
A34	823424.53	838140.2	5.2	7.5	122	0	78	0	122	1	85	1
A35	823581.4	838166.3	5	7.5	122	0	78	0	122	3	85	2
A36	823703.1	837968.5	3.5	7.5	122	0	78	0	123	3	85	2
A1Pa	823687.9	837719	3	7.5	122	0	78	0	122	2	85	1
A2Pa	823545.2	837421.1	3	7.5	123	2	78	1	123	2	85	1
A3Pa	823454.7	837785.1	4	7.5	122	0	78	0	122	3	85	2
A4Pa	823304.9	837427.1	4	7.5	122	2	78	1	122	2	85	1
A5Pa	823602.1	837795.8	4	7.5	122	1	78	0	122	0	85	0
V01	823571.7	837355.7	3	7.5	123	1	78	1	123	1	85	1
V02	823780.1	837738.5	2.4	7.5	122	0	78	0	122	1	85	1
V03	823524.7	837232	3	7.5	122	2	78	1	122	2	85	1
V04	823384.5	837124.2	4.8	7.5	122	2	79	1	122	2	85	1
Max. RSP Level, ug/m³					124	11	80	4	125	11	86	6
Relevant AQO Criteria, ug/m³					100	100	100	100	100	100	100	100
Compliance with AQO?					-	-	Yes	Yes	-	-	Yes	Yes

Remark: * The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution in order to calculate the daily average total RSP levels.

** Planned ASR within the planned "Yau Mei Site" Project, which is not applicable in this cumulative impact assessment.

Annex 3-3 Summary Table of Cumulative Daily Average FSP Level (Mitigated Scenario)

ASR	X	Y	Z	Height above ground	Due to this Project Only (extracted from Appendix 3-7 of this EIA report)				Due to Cumulative Construction with planned "Yau Mei Site" Project			
					1st Highest Daily FSP (With Bkg. Level) * & **		10th Highest Daily FSP (With Bkg. Level) * & **		1st Highest Daily FSP (With Bkg. Level) * & **		10th Highest Daily FSP (With Bkg. Level) * & **	
					With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level
A01	823101.12	837242.4	4.4	1.5	91	0	59	0	91	0	64	0
A01A	823124.28	837181.3	4.4	1.5	91	1	59	0	91	1	64	0
A02	823092.84	837314	4.4	1.5	91	0	59	0	91	0	64	0
A02A	823119.86	837359.1	4.4	1.5	91	0	59	0	91	0	64	0
A03	823260.81	837373.7	4.4	1.5	91	1	59	0	91	1	64	0
A04	823276.81	837456.1	4.3	1.5	91	1	59	0	91	1	64	0
A05	823287.12	837673.9	4.2	1.5	91	0	59	0	91	1	64	0
A05A	823269.63	837644.5	4.2	1.5	91	0	59	0	91	0	64	0
A05B	823308.73	837726.2	4.2	1.5	91	0	59	0	91	1	64	0
A06	823405	837870	4.2	1.5	91	0	59	0	91	1	64	1
A06A	823365.92	837883.6	4.2	1.5	91	0	59	0	91	1	64	1
A07	823788.62	837882.5	3.1	1.5	91	0	59	0	92	2	64	1
A08	823679.12	837571.7	2.3	1.5	91	0	59	0	91	0	64	0
A09	823717.31	837567	3.5	1.5	91	0	59	0	91	0	64	0
A10	823227.62	837343.9	4.4	1.5	91	1	59	0	91	1	64	0
A10A	823188.8	837327.3	4.4	1.5	91	0	59	0	91	0	64	0
A11	823382.12	837043.2	4.5	1.5	91	3	59	0	91	3	64	0
A12	823509.19	837017.6	6.5	1.5	91	1	59	0	91	1	64	0
A13	823171.38	837105	4.6	1.5	91	0	59	0	91	0	64	0
A14	823175.5	837030.5	4.4	1.5	91	0	59	0	91	0	64	0
A15	823271.81	836947.2	4.1	1.5	91	1	59	0	91	1	64	0
A16	823496	837908.2	4.2	1.5	91	0	59	0	92	3	64	2
A16A	823470.21	837871.6	4.2	1.5	91	0	59	0	91	3	64	2
A17	823500.62	838152.4	5.7	1.5	91	0	59	0	91	1	64	1
A18	823725.62	838015.9	3.5	1.5	91	0	59	0	92	1	64	1
A19	823749.5	837459.6	3.3	1.5	91	0	59	0	91	0	64	0
A20	823745.38	837355.3	4.2	1.5	92	0	59	0	92	0	64	0
A21	823713.88	837274	4.2	1.5	91	0	59	0	91	0	64	0
A22	823645.12	837066.1	3.5	1.5	91	0	59	0	91	0	64	0
A23	823920.62	837886.7	3.6	1.5	91	0	59	0	92	1	64	0
A24	823927.69	837923.6	3.5	1.5	91	0	59	0	92	0	64	0
A25	823756	838085.2	4.9	1.5	91	0	59	0	92	1	64	0
A26	823040.62	838098.6	4.4	1.5	91	0	59	0	91	0	64	0
A27	823465.59	837089.9	4.5	1.5	91	3	59	0	91	3	64	0
A28	823286.57	837864.2	4.3	1.5	91	0	59	0	91	1	64	0
A29	823279.17	837826.6	4.3	1.5	91	0	59	0	91	1	64	0
A30	823293.2	837534.5	4.5	1.5	91	0	59	0	91	0	64	0
A31	823393.53	837959.7	3.9	1.5	91	0	59	0	91	2	64	1
A32	823353.02	837069.1	4.5	1.5	91	2	59	0	91	2	64	0
A33	823439.27	837932.1	3.9	1.5	91	0	59	0	91	3	64	1
A34	823424.53	838140.2	5.2	1.5	91	0	59	0	91	1	64	0
A35	823581.4	838166.3	5	1.5	91	0	59	0	91	1	64	1
A36	823703.1	837968.5	3.5	1.5	91	0	59	0	92	2	64	1
A1Pa	823687.9	837719	3	1.5	91	0	59	0	91	1	64	0
A2Pa	823545.2	837421.1	3	1.5	92	1	59	1	92	1	64	1
A3Pa	823454.7	837785.1	4	1.5	91	0	59	0	91	3	64	1
A4Pa	823304.9	837427.1	4	1.5	91	1	59	0	91	1	64	0
A5Pa	823602.1	837795.8	4	1.5	91	0	59	0	91	0	64	0
V01	823571.7	837355.7	3	1.5	92	1	59	1	92	1	64	1
V02	823780.1	837738.5	2.4	1.5	91	0	59	0	91	1	64	0
V03	823524.7	837232	3	1.5	91	2	59	1	91	2	64	1
V04	823384.5	837124.2	4.8	1.5	91	3	59	1	91	3	64	1
A01	823101.12	837242.4	4.4	4.5	91	0	59	0	91	0	64	0
A01A	823124.28	837181.3	4.4	4.5	91	0	59	0	91	0	64	0
A02	823092.84	837314	4.4	4.5	91	0	59	0	91	0	64	0
A02A	823119.86	837359.1	4.4	4.5	91	0	59	0	91	0	64	0
A03	823260.81	837373.7	4.4	4.5	91	0	59	0	91	0	64	0
A04	823276.81	837456.1	4.3	4.5	91	1	59	0	91	1	64	0
A05	823287.12	837673.9	4.2	4.5	91	0	59	0	91	0	64	0
A05A	823269.63	837644.5	4.2	4.5	91	0	59	0	91	0	64	0
A05B	823308.73	837726.2	4.2	4.5	91	0	59	0	91	1	64	0
A06	823405	837870	4.2	4.5	91	0	59	0	91	1	64	1
A06A	823365.92	837883.6	4.2	4.5	91	0	59	0	91	1	64	1
A07	823788.62	837882.5	3.1	4.5	91	0	59	0	92	1	64	1
A08	823679.12	837571.7	2.3	4.5	91	0	59	0	91	0	64	0
A09	823717.31	837567	3.5	4.5	91	0	59	0	91	0	64	0
A10	823227.62	837343.9	4.4	4.5	91	1	59	0	91	1	64	0
A10A	823188.8	837327.3	4.4	4.5	91	0	59	0	91	0	64	0
A11	823382.12	837043.2	4.5	4.5	91	2	59	0	91	2	64	0
A12	823509.19	837017.6	6.5	4.5	91	0	59	0	91	1	64	0
A13	823171.38	837105	4.6	4.5	91	0	59	0	91	0	64	0
A14	823175.5	837030.5	4.4	4.5	91	0	59	0	91	0	64	0
A15	823271.81	836947.2	4.1	4.5	91	1	59	0	91	1	64	0
A16	823496	837908.2	4.2	4.5	91	0	59	0	91	2	64	1
A16A	823470.21	837871.6	4.2	4.5	91	0	59	0	91	2	64	1
A17	823500.62	838152.4	5.7	4.5	91	0	59	0	91	1	64	0
A18	823725.62	838015.9	3.5	4.5	91	0	59	0	92	1	64	1
A19	823749.5	837459.6	3.3	4.5	91	0	59	0	91	0	64	0
A20	823745.38	837355.3	4.2	4.5	92	0	59	0	92	0	64	0
A21	823713.88	837274	4.2	4.5	91	0	59	0	91	0	64	0
A22	823645.12	837066.1	3.5	4.5	91	0	59	0	91	0	64	0
A23	823920.62	837886.7	3.6	4.5	91	0	59	0	92	1	64	0
A24	823927.69	837923.6	3.5	4.5	91	0	59	0	92	0	64	0
A25	823756	838085.2	4.9	4.5	91	0	59	0	92	1	64	0
A26	823040.62	838098.6	4.4	4.5	91	0	59	0	91	0	64	0
A27	823465.59	837089.9	4.5	4.5	91	2	59	0	91	2	64	0
A28	823286.57	837864.2	4.3	4.5	91	0	59	0	91	0	64	0
A29	823279.17	837826.6	4.3	4.5	91	0	59	0	91	1	64	0
A30	823293.2	837534.5	4.5	4.5	91	0	59	0	91	0	64	0
A31	823393.53	837959.7	3.9	4.5	91	0	59	0	91	1	64	1
A32	823353.02	837069.1	4.5	4.5	91	1	59	0	91	1	64	0
A33	823439.27	837932.1	3.9	4.5	91	0	59	0	91	1	64	1
A34	823424.53	838140.2	5.2	4.5	91	0	59	0	91	1	64	0
A35	823581.4	838166.3	5	4.5	91	0	59	0	91	1	64	1
A36	823703.1	837968.5	3.5	4.5	91	0	59	0	92	1	64	1
A1Pa	823687.9	837719	3	4.5	91	0	59	0	91	1	64	0
A2Pa	823545.2	837421.1	3	4.5	92	1	59	0	92	1	64	0
A3Pa	823454.7	837785.1	4	4.5	91	0	59	0	91	1	64	1
A4Pa	823304.9	837427.1	4	4.5	91	1	59	0	91	1	64	0
A5Pa	823602.1	837795.8	4	4.5	91	0	59	0	91	0	64	0
V01	823571.7	837355.7	3	4.5	92	1	59	0	92	1	64	0
V02	823780.1	837738.5	2.4	4.5	91	0	59	0	91	1	64	0
V03	823524.7	837232	3	4.5	91	1	59	0	91	1	64	1
V04	823384.5	837124.2	4.8	4.5	91	1	59	1	91	1	64	1
A01	823101.12	837242.4	4.4	7.5	91	0	59	0	91	0	64	0
A01A	823124.28	837181.3	4.4	7.5	91	0	59	0	91	0	64	0
A02	823092.84	837314	4.4	7.5	91	0	59	0	91	0	64	0
A02A	823119.86	837359.1	4.4	7.5	91	0	59	0	91	0	64	0
A03	823260.81	837373.7	4.4	7.5	91	0	59	0	91	0	64	0
A04	823276.81	837456.1	4.3	7.5	91	0	59	0	91	0	64	0
A05	823287.12	837673.9	4.2	7.5	91	0	59	0	91	0	64	0

ASR	X	Y	Z	Height above ground	1st Highest Daily FSP (With Bkg. Level) * & **		10th Highest Daily FSP (With Bkg. Level) * & **		1st Highest Daily FSP (With Bkg. Level) * & **		10th Highest Daily FSP (With Bkg. Level) * & **	
					With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level
A05A	823269.63	837644.5	4.2	7.5	91	0	59	0	91	0	64	0
A05B	823308.73	837726.2	4.2	7.5	91	0	59	0	91	0	64	0
A06	823405	837870	4.2	7.5	91	0	59	0	91	1	64	1
A06A	823365.92	837883.6	4.2	7.5	91	0	59	0	91	1	64	0
A07	823788.62	837882.5	3.1	7.5	91	0	59	0	92	1	64	1
A08	823679.12	837571.7	2.3	7.5	91	0	59	0	91	0	64	0
A09	823717.31	837567	3.5	7.5	91	0	59	0	91	0	64	0
A10	823227.62	837343.9	4.4	7.5	91	0	59	0	91	0	64	0
A10A	823188.8	837327.3	4.4	7.5	91	0	59	0	91	0	64	0
A11	823382.12	837043.2	4.5	7.5	91	1	59	0	91	1	64	0
A12	823509.19	837017.6	6.5	7.5	91	0	59	0	91	0	64	0
A13	823171.38	837105	4.6	7.5	91	0	59	0	91	0	64	0
A14	823175.5	837030.5	4.4	7.5	91	0	59	0	91	0	64	0
A15	823271.81	836947.2	4.1	7.5	91	1	59	0	91	1	64	0
A16	823496	837908.2	4.2	7.5	91	0	59	0	91	1	64	1
A16A	823470.21	837871.6	4.2	7.5	91	0	59	0	91	1	64	1
A17	823500.62	838152.4	5.7	7.5	91	0	59	0	91	1	64	0
A18	823725.62	838015.9	3.5	7.5	91	0	59	0	92	1	64	1
A19	823749.5	837459.6	3.3	7.5	91	0	59	0	91	0	64	0
A20	823745.38	837355.3	4.2	7.5	91	0	59	0	91	0	64	0
A21	823713.88	837274	4.2	7.5	91	0	59	0	91	0	64	0
A22	823645.12	837066.1	3.5	7.5	91	0	59	0	91	0	64	0
A23	823920.62	837886.7	3.6	7.5	91	0	59	0	92	0	64	0
A24	823927.69	837923.6	3.5	7.5	91	0	59	0	92	0	64	0
A25	823756	838085.2	4.9	7.5	91	0	59	0	92	0	64	0
A26	823040.62	838098.6	4.4	7.5	91	0	59	0	91	0	64	0
A27	823465.59	837089.9	4.5	7.5	91	1	59	0	91	1	64	0
A28	823286.57	837864.2	4.3	7.5	91	0	59	0	91	0	64	0
A29	823279.17	837826.6	4.3	7.5	91	0	59	0	91	1	64	0
A30	823293.2	837534.5	4.5	7.5	91	0	59	0	91	0	64	0
A31	823393.53	837959.7	3.9	7.5	91	0	59	0	91	1	64	0
A32	823353.02	837069.1	4.5	7.5	91	1	59	0	91	1	64	0
A33	823439.27	837932.1	3.9	7.5	91	0	59	0	91	1	64	0
A34	823424.53	838140.2	5.2	7.5	91	0	59	0	91	0	64	0
A35	823581.4	838166.3	5	7.5	91	0	59	0	91	1	64	0
A36	823703.1	837968.5	3.5	7.5	91	0	59	0	92	1	64	1
A1Pa	823687.9	837719	3	7.5	91	0	59	0	91	1	64	0
A2Pa	823545.2	837421.1	3	7.5	92	1	59	0	92	1	64	0
A3Pa	823454.7	837785.1	4	7.5	91	0	59	0	91	1	64	1
A4Pa	823304.9	837427.1	4	7.5	91	1	59	0	91	1	64	0
A5Pa	823602.1	837795.8	4	7.5	91	0	59	0	91	0	64	0
V01	823571.7	837355.7	3	7.5	92	0	59	0	92	0	64	0
V02	823780.1	837738.5	2.4	7.5	91	0	59	0	91	0	64	0
V03	823524.7	837232	3	7.5	91	1	59	0	91	1	64	0
V04	823384.5	837124.2	4.8	7.5	91	1	59	0	91	1	64	0
Max. FSP Level, ug/m3					92	3	59	1	92	3	64	2
Relevant AQO Criteria, ug/m³					75	75	75	75	75	75	75	75
Compliance with AQO?					-	-	Yes	Yes	-	-	Yes	Yes

Remark: * The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution in order to calculate the daily average total RSP levels.

** The FSP concentrations are calculated based on the predicted RSP concentrations by applying a FSP/RSP ratio of 0.3 according to the USEPA AP-42 reference document. Please refer to Appendix 3-10 for the justification of FSP/RSP ratio.

*** Planned ASR within the planned 'Yau Mei Site' Project, which is not applicable in this cumulative impact assessment.

Annex 3-4 Summary Table of Cumulative Maximum Annual Average RSP Level (Mitigated Scenario)

ASR	X	Y	Z	Height above ground	Due to this Project Only (extracted from Appendix 3-7 of this EIA report)		Due to Cumulative Construction with planned "Yau Mei Site" Project	
					Annual Average RSP (With Bkg. Level) *	Annual Average RSP (W/o Bkg.)	Annual Average RSP (With Bkg. Level) *	Annual Average RSP (W/o Bkg.)
					With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level
A01	823101	837242	4.4	1.5	43.3	0.1	43.4	0.1
A01A	823124	837181	4.4	1.5	43.4	0.1	43.4	0.2
A02	823093	837314	4.4	1.5	43.3	0.1	43.4	0.1
A02A	823120	837359	4.4	1.5	43.3	0.1	43.4	0.1
A03	823261	837374	4.4	1.5	43.4	0.1	43.5	0.2
A04	823277	837456	4.3	1.5	43.3	0.1	43.4	0.2
A05	823287	837674	4.2	1.5	43.3	0.0	43.4	0.2
A05A	823270	837645	4.2	1.5	43.3	0.0	43.4	0.2
A05B	823309	837726	4.2	1.5	43.3	0.0	43.5	0.2
A06	823405	837870	4.2	1.5	43.3	0.0	43.8	0.5
A06A	823366	837884	4.2	1.5	43.3	0.0	43.6	0.4
A07	823789	837883	3.1	1.5	43.3	0.0	43.7	0.4
A08	823679	837572	2.3	1.5	43.3	0.0	43.3	0.1
A09	823717	837567	3.5	1.5	43.3	0.0	43.3	0.1
A10	823228	837344	4.4	1.5	43.4	0.1	43.4	0.2
A10A	823189	837327	4.4	1.5	43.3	0.1	43.4	0.2
A11	823382	837043	4.5	1.5	43.4	0.2	43.4	0.2
A12	823509	837018	6.5	1.5	43.3	0.0	43.3	0.0
A13	823171	837105	4.6	1.5	43.4	0.1	43.4	0.2
A14	823176	837031	4.4	1.5	43.3	0.1	43.4	0.1
A15	823272	836947	4.1	1.5	43.3	0.1	43.3	0.1
A16	823496	837908	4.2	1.5	43.3	0.0	44.4	1.1
A16A	823470	837872	4.2	1.5	43.3	0.0	44.3	1.0
A17	823501	838152	5.7	1.5	43.3	0.0	43.5	0.2
A18	823726	838016	3.5	1.5	43.3	0.0	43.7	0.5
A19	823750	837460	3.3	1.5	43.3	0.0	43.3	0.1
A20	823745	837355	4.2	1.5	43.3	0.0	43.3	0.1
A21	823714	837274	4.2	1.5	43.3	0.1	43.3	0.1
A22	823645	837066	3.5	1.5	43.3	0.0	43.3	0.0
A23	823921	837887	3.6	1.5	43.3	0.0	43.4	0.1
A24	823928	837924	3.5	1.5	43.3	0.0	43.4	0.1
A25	823756	838085	4.9	1.5	43.3	0.0	43.5	0.3
A26	823041	838099	4.4	1.5	43.3	0.0	43.3	0.1
A27	823466	837090	4.5	1.5	43.4	0.2	43.4	0.2
A28	823287	837864	4.3	1.5	43.3	0.0	43.5	0.2
A29	823279	837827	4.3	1.5	43.3	0.0	43.5	0.2
A30	823293	837535	4.5	1.5	43.3	0.1	43.4	0.2
A31	823394	837960	3.9	1.5	43.3	0.0	43.7	0.4
A32	823353	837069	4.5	1.5	43.4	0.2	43.5	0.2
A33	823439	837932	3.9	1.5	43.3	0.0	43.9	0.7
A34	823425	838140	5.2	1.5	43.3	0.0	43.4	0.1
A35	823581	838166	5	1.5	43.3	0.0	43.6	0.3
A36	823703	837968	3.5	1.5	43.3	0.0	44.1	0.8
A1Pa	823688	837719	3	1.5	43.3	0.0	43.5	0.3
A2Pa	823545	837421	3	1.5	43.5	0.3	43.6	0.3
A3Pa	823455	837785	4	1.5	43.3	0.0	44.0	0.7
A4Pa	823305	837427	4	1.5	43.4	0.1	43.5	0.2
A5Pa	823602	837796	4	1.5	43.3	0.0	43	0
V01	823572	837356	3	1.5	43.5	0.3	43.5	0.3
V02	823780	837738	2.4	1.5	43.3	0.0	43.4	0.1
V03	823525	837232	3	1.5	43.5	0.3	43.6	0.3
V04	823385	837124	4.8	1.5	43.7	0.4	43.7	0.4
A01	823101	837242	4.4	4.5	43.3	0.1	43.4	0.1
A01A	823124	837181	4.4	4.5	43.3	0.1	43.4	0.1
A02	823093	837314	4.4	4.5	43.3	0.1	43.4	0.1
A02A	823120	837359	4.4	4.5	43.3	0.1	43.4	0.1
A03	823261	837374	4.4	4.5	43.4	0.1	43.4	0.2
A04	823277	837456	4.3	4.5	43.3	0.1	43.4	0.2
A05	823287	837674	4.2	4.5	43.3	0.0	43.4	0.2
A05A	823270	837645	4.2	4.5	43.3	0.0	43.4	0.2
A05B	823309	837726	4.2	4.5	43.3	0.0	43.5	0.2
A06	823405	837870	4.2	4.5	43.3	0.0	43.7	0.4
A06A	823366	837884	4.2	4.5	43.3	0.0	43.6	0.3
A07	823789	837883	3.1	4.5	43.3	0.0	43.6	0.3
A08	823679	837572	2.3	4.5	43.3	0.0	43.3	0.1
A09	823717	837567	3.5	4.5	43.3	0.0	43.3	0.1
A10	823228	837344	4.4	4.5	43.3	0.1	43.4	0.2
A10A	823189	837327	4.4	4.5	43.3	0.1	43.4	0.2
A11	823382	837043	4.5	4.5	43.4	0.1	43.4	0.1
A12	823509	837018	6.5	4.5	43.3	0.0	43.3	0.0
A13	823171	837105	4.6	4.5	43.4	0.1	43.4	0.2
A14	823176	837031	4.4	4.5	43.3	0.1	43.4	0.1
A15	823272	836947	4.1	4.5	43.3	0.1	43.3	0.1
A16	823496	837908	4.2	4.5	43.3	0.0	43.9	0.7
A16A	823470	837872	4.2	4.5	43.3	0.0	43.9	0.6
A17	823501	838152	5.7	4.5	43.3	0.0	43.4	0.2
A18	823726	838016	3.5	4.5	43.3	0.0	43.7	0.4
A19	823750	837460	3.3	4.5	43.3	0.0	43.3	0.1
A20	823745	837355	4.2	4.5	43.3	0.0	43.3	0.1
A21	823714	837274	4.2	4.5	43.3	0.1	43.3	0.1
A22	823645	837066	3.5	4.5	43.3	0.0	43.3	0.0
A23	823921	837887	3.6	4.5	43.3	0.0	43.4	0.1
A24	823928	837924	3.5	4.5	43.3	0.0	43.3	0.1
A25	823756	838085	4.9	4.5	43.3	0.0	43.5	0.3
A26	823041	838099	4.4	4.5	43.3	0.0	43.3	0.1
A27	823466	837090	4.5	4.5	43.3	0.1	43.3	0.1
A28	823287	837864	4.3	4.5	43.3	0.0	43.5	0.2
A29	823279	837827	4.3	4.5	43.3	0.0	43.5	0.2
A30	823293	837535	4.5	4.5	43.3	0.0	43.4	0.2
A31	823394	837960	3.9	4.5	43.3	0.0	43.6	0.3
A32	823353	837069	4.5	4.5	43.4	0.1	43.4	0.2
A33	823439	837932	3.9	4.5	43.3	0.0	43.7	0.5
A34	823425	838140	5.2	4.5	43.3	0.0	43.4	0.1
A35	823581	838166	5	4.5	43.3	0.0	43.5	0.3
A36	823703	837968	3.5	4.5	43.3	0.0	43.8	0.6
A1Pa	823688	837719	3	4.5	43.3	0.0	43.5	0.2
A2Pa	823545	837421	3	4.5	43.5	0.2	43.5	0.3
A3Pa	823455	837785	4	4.5	43.3	0.0	43.8	0.5
A4Pa	823305	837427	4	4.5	43.3	0.1	43.4	0.2
A5Pa	823602	837796	4	4.5	43.3	0.0	43	0
V01	823572	837356	3	4.5	43.4	0.2	43.5	0.2
V02	823780	837738	2.4	4.5	43.3	0.0	43.4	0.1

ASR	X	Y	Z	Height above ground	Annual Average RSP (With Bkg. Level) *		Annual Average RSP (W/o Bkg.)	
					With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level
V03	823525	837232	3	4.5	43.4	0.2	43.5	0.2
V04	823385	837124	4.8	4.5	43.4	0.2	43.5	0.2
A01	823101	837242	4.4	7.5	43.3	0.1	43.4	0.1
A01A	823124	837181	4.4	7.5	43.3	0.1	43.4	0.1
A02	823093	837314	4.4	7.5	43.3	0.1	43.4	0.1
A02A	823120	837359	4.4	7.5	43.3	0.0	43.4	0.1
A03	823261	837374	4.4	7.5	43.3	0.1	43.4	0.2
A04	823277	837456	4.3	7.5	43.3	0.0	43.4	0.1
A05	823287	837674	4.2	7.5	43.3	0.0	43.4	0.2
A05A	823270	837645	4.2	7.5	43.3	0.0	43.4	0.2
A05B	823309	837726	4.2	7.5	43.3	0.0	43.4	0.2
A06	823405	837870	4.2	7.5	43.3	0.0	43.5	0.3
A06A	823366	837884	4.2	7.5	43.3	0.0	43.5	0.2
A07	823789	837883	3.1	7.5	43.3	0.0	43.5	0.2
A08	823679	837572	2.3	7.5	43.3	0.0	43.3	0.1
A09	823717	837567	3.5	7.5	43.3	0.0	43.3	0.1
A10	823228	837344	4.4	7.5	43.3	0.1	43.4	0.1
A10A	823189	837327	4.4	7.5	43.3	0.1	43.4	0.1
A11	823382	837043	4.5	7.5	43.3	0.1	43.3	0.1
A12	823509	837018	6.5	7.5	43.3	0.0	43.3	0.0
A13	823171	837105	4.6	7.5	43.3	0.1	43.4	0.1
A14	823176	837031	4.4	7.5	43.3	0.1	43.4	0.1
A15	823272	836947	4.1	7.5	43.3	0.1	43.3	0.1
A16	823496	837908	4.2	7.5	43.3	0.0	43.6	0.4
A16A	823470	837872	4.2	7.5	43.3	0.0	43.6	0.4
A17	823501	838152	5.7	7.5	43.3	0.0	43.4	0.2
A18	823726	838016	3.5	7.5	43.3	0.0	43.6	0.3
A19	823750	837460	3.3	7.5	43.3	0.0	43.3	0.0
A20	823745	837355	4.2	7.5	43.3	0.0	43.3	0.0
A21	823714	837274	4.2	7.5	43.3	0.0	43.3	0.1
A22	823645	837066	3.5	7.5	43.3	0.0	43.3	0.0
A23	823921	837887	3.6	7.5	43.3	0.0	43.4	0.1
A24	823928	837924	3.5	7.5	43.3	0.0	43.3	0.1
A25	823756	838085	4.9	7.5	43.3	0.0	43.5	0.2
A26	823041	838099	4.4	7.5	43.3	0.0	43.3	0.1
A27	823466	837090	4.5	7.5	43.3	0.0	43.3	0.1
A28	823287	837864	4.3	7.5	43.3	0.0	43.4	0.2
A29	823279	837827	4.3	7.5	43.3	0.0	43.4	0.2
A30	823293	837535	4.5	7.5	43.3	0.0	43.4	0.2
A31	823394	837960	3.9	7.5	43.3	0.0	43.5	0.2
A32	823353	837069	4.5	7.5	43.3	0.1	43.4	0.1
A33	823439	837932	3.9	7.5	43.3	0.0	43.5	0.3
A34	823425	838140	5.2	7.5	43.3	0.0	43.3	0.1
A35	823581	838166	5	7.5	43.3	0.0	43.5	0.2
A36	823703	837968	3.5	7.5	43.3	0.0	43.6	0.4
A1Pa	823688	837719	3	7.5	43.3	0.0	43.4	0.2
A2Pa	823545	837421	3	7.5	43.4	0.2	43.5	0.2
A3Pa	823455	837785	4	7.5	43.3	0.0	43.6	0.4
A4Pa	823305	837427	4	7.5	43.3	0.1	43.4	0.2
A5Pa	823602	837796	4	7.5	43.3	0.0	43	0
V01	823572	837356	3	7.5	43.4	0.1	43.4	0.2
V02	823780	837738	2.4	7.5	43.3	0.0	43.3	0.1
V03	823525	837232	3	7.5	43.4	0.1	43.4	0.1
V04	823385	837124	4.8	7.5	43.4	0.1	43.4	0.1
Max. RSP Level, ug/m3					43.7	0.4	44.4	1.1
Relevant AQO Criteria, ug/m3					50	50	50	50
Compliance with AQO?					Yes	Yes	Yes	Yes

Remark: * The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution in order to calculate the annual average total RSP levels.

** Planned ASR within the planned "Yau Mei Site" Project, which is not applicable in this cumulative impact assessment.

Annex 3-5 Summary Table of Cumulative Maximum Annual Average FSP Level (Mitigated Scenario)

ASR	X	Y	Z	Height above ground	Due to this Project Only (extracted from Appendix 3-7 of this EIA report)		Due to Cumulative Construction with planned "Yau Mei Site" Project	
					Annual Average FSP (With Bkg. Level) * & **		Annual Average FSP (With Bkg. Level) * & **	
					With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level
A01	823101	837242	4.4	1.5	30.7	0.0	30.7	0.0
A01A	823124	837181	4.4	1.5	30.7	0.0	30.8	0.0
A02	823093	837314	4.4	1.5	30.7	0.0	30.7	0.0
A02A	823120	837359	4.4	1.5	30.7	0.0	30.7	0.0
A03	823261	837374	4.4	1.5	30.7	0.0	30.8	0.1
A04	823277	837456	4.3	1.5	30.7	0.0	30.8	0.1
A05	823287	837674	4.2	1.5	30.7	0.0	30.8	0.1
A05A	823270	837645	4.2	1.5	30.7	0.0	30.8	0.1
A05B	823309	837726	4.2	1.5	30.7	0.0	30.8	0.1
A06	823405	837870	4.2	1.5	30.7	0.0	30.9	0.2
A06A	823366	837884	4.2	1.5	30.7	0.0	30.8	0.1
A07	823789	837883	3.1	1.5	30.7	0.0	30.8	0.1
A08	823679	837572	2.3	1.5	30.7	0.0	30.7	0.0
A09	823717	837567	3.5	1.5	30.7	0.0	30.7	0.0
A10	823228	837344	4.4	1.5	30.7	0.0	30.8	0.1
A10A	823189	837327	4.4	1.5	30.7	0.0	30.8	0.1
A11	823382	837043	4.5	1.5	30.8	0.0	30.8	0.1
A12	823509	837018	6.5	1.5	30.7	0.0	30.7	0.0
A13	823171	837105	4.6	1.5	30.7	0.0	30.8	0.0
A14	823176	837031	4.4	1.5	30.7	0.0	30.7	0.0
A15	823272	836947	4.1	1.5	30.7	0.0	30.7	0.0
A16	823496	837908	4.2	1.5	30.7	0.0	31.0	0.3
A16A	823470	837872	4.2	1.5	30.7	0.0	31.0	0.3
A17	823501	838152	5.7	1.5	30.7	0.0	30.8	0.1
A18	823726	838016	3.5	1.5	30.7	0.0	30.9	0.1
A19	823750	837460	3.3	1.5	30.7	0.0	30.7	0.0
A20	823745	837355	4.2	1.5	30.7	0.0	30.7	0.0
A21	823714	837274	4.2	1.5	30.7	0.0	30.7	0.0
A22	823645	837066	3.5	1.5	30.7	0.0	30.7	0.0
A23	823921	837887	3.6	1.5	30.7	0.0	30.7	0.0
A24	823928	837924	3.5	1.5	30.7	0.0	30.7	0.0
A25	823756	838085	4.9	1.5	30.7	0.0	30.8	0.1
A26	823041	838099	4.4	1.5	30.7	0.0	30.7	0.0
A27	823466	837090	4.5	1.5	30.8	0.1	30.8	0.1
A28	823287	837864	4.3	1.5	30.7	0.0	30.8	0.1
A29	823279	837827	4.3	1.5	30.7	0.0	30.8	0.1
A30	823293	837535	4.5	1.5	30.7	0.0	30.8	0.1
A31	823394	837960	3.9	1.5	30.7	0.0	30.8	0.1
A32	823353	837069	4.5	1.5	30.8	0.1	30.8	0.1
A33	823439	837932	3.9	1.5	30.7	0.0	30.9	0.2
A34	823425	838140	5.2	1.5	30.7	0.0	30.7	0.0
A35	823581	838166	5	1.5	30.7	0.0	30.8	0.1
A36	823703	837968	3.5	1.5	30.7	0.0	30.9	0.2
A1Pa	823688	837719	3	1.5	30.7	0.0	30.8	0.1
A2Pa	823545	837421	3	1.5	30.8	0.1	30.8	0.1
A3Pa	823455	837785	4	1.5	30.7	0.0	30.9	0.2
A4Pa	823305	837427	4	1.5	30.7	0.0	30.8	0.1
A5Pa	823602	837796	4	1.5	30.7	0.0	31	0
V01	823572	837356	3	1.5	30.8	0.1	30.8	0.1
V02	823780	837738	2.4	1.5	30.7	0.0	30.7	0.0
V03	823525	837232	3	1.5	30.8	0.1	30.8	0.1
V04	823385	837124	4.8	1.5	30.8	0.1	30.8	0.1
A01	823101	837242	4.4	4.5	30.7	0.0	30.7	0.0
A01A	823124	837181	4.4	4.5	30.7	0.0	30.7	0.0
A02	823093	837314	4.4	4.5	30.7	0.0	30.7	0.0
A02A	823120	837359	4.4	4.5	30.7	0.0	30.7	0.0
A03	823261	837374	4.4	4.5	30.7	0.0	30.8	0.1
A04	823277	837456	4.3	4.5	30.7	0.0	30.8	0.1
A05	823287	837674	4.2	4.5	30.7	0.0	30.8	0.1
A05A	823270	837645	4.2	4.5	30.7	0.0	30.8	0.1
A05B	823309	837726	4.2	4.5	30.7	0.0	30.8	0.1
A06	823405	837870	4.2	4.5	30.7	0.0	30.8	0.1
A06A	823366	837884	4.2	4.5	30.7	0.0	30.8	0.1
A07	823789	837883	3.1	4.5	30.7	0.0	30.8	0.1
A08	823679	837572	2.3	4.5	30.7	0.0	30.7	0.0
A09	823717	837567	3.5	4.5	30.7	0.0	30.7	0.0
A10	823228	837344	4.4	4.5	30.7	0.0	30.8	0.1
A10A	823189	837327	4.4	4.5	30.7	0.0	30.7	0.0
A11	823382	837043	4.5	4.5	30.7	0.0	30.7	0.0
A12	823509	837018	6.5	4.5	30.7	0.0	30.7	0.0
A13	823171	837105	4.6	4.5	30.7	0.0	30.7	0.0
A14	823176	837031	4.4	4.5	30.7	0.0	30.7	0.0
A15	823272	836947	4.1	4.5	30.7	0.0	30.7	0.0
A16	823496	837908	4.2	4.5	30.7	0.0	30.9	0.2
A16A	823470	837872	4.2	4.5	30.7	0.0	30.9	0.2
A17	823501	838152	5.7	4.5	30.7	0.0	30.8	0.1
A18	823726	838016	3.5	4.5	30.7	0.0	30.8	0.1
A19	823750	837460	3.3	4.5	30.7	0.0	30.7	0.0
A20	823745	837355	4.2	4.5	30.7	0.0	30.7	0.0
A21	823714	837274	4.2	4.5	30.7	0.0	30.7	0.0
A22	823645	837066	3.5	4.5	30.7	0.0	30.7	0.0
A23	823921	837887	3.6	4.5	30.7	0.0	30.7	0.0
A24	823928	837924	3.5	4.5	30.7	0.0	30.7	0.0
A25	823756	838085	4.9	4.5	30.7	0.0	30.8	0.1
A26	823041	838099	4.4	4.5	30.7	0.0	30.7	0.0
A27	823466	837090	4.5	4.5	30.7	0.0	30.7	0.0
A28	823287	837864	4.3	4.5	30.7	0.0	30.8	0.1
A29	823279	837827	4.3	4.5	30.7	0.0	30.8	0.1
A30	823293	837535	4.5	4.5	30.7	0.0	30.8	0.1
A31	823394	837960	3.9	4.5	30.7	0.0	30.8	0.1
A32	823353	837069	4.5	4.5	30.7	0.0	30.8	0.0
A33	823439	837932	3.9	4.5	30.7	0.0	30.8	0.1
A34	823425	838140	5.2	4.5	30.7	0.0	30.7	0.0
A35	823581	838166	5	4.5	30.7	0.0	30.8	0.1
A36	823703	837968	3.5	4.5	30.7	0.0	30.9	0.2
A1Pa	823688	837719	3	4.5	30.7	0.0	30.8	0.1
A2Pa	823545	837421	3	4.5	30.8	0.1	30.8	0.1
A3Pa	823455	837785	4	4.5	30.7	0.0	30.9	0.2
A4Pa	823305	837427	4	4.5	30.7	0.0	30.8	0.1
A5Pa	823602	837796	4	4.5	30.7	0.0	31	0
V01	823572	837356	3	4.5	30.8	0.1	30.8	0.1

ASR	X	Y	Z	Height above ground	Annual Average FSP (With Bkg. Level) * & **		Annual Average FSP (With Bkg. Level) * & **	
					With Bkg. Level	Without Bkg. Level	With Bkg. Level	Without Bkg. Level
V02	823780	837738	2.4	4.5	30.7	0.0	30.7	0.0
V03	823525	837232	3	4.5	30.8	0.1	30.8	0.1
V04	823385	837124	4.8	4.5	30.8	0.1	30.8	0.1
A01	823101	837242	4.4	7.5	30.7	0.0	30.7	0.0
A01A	823124	837181	4.4	7.5	30.7	0.0	30.7	0.0
A02	823093	837314	4.4	7.5	30.7	0.0	30.7	0.0
A02A	823120	837359	4.4	7.5	30.7	0.0	30.7	0.0
A03	823261	837374	4.4	7.5	30.7	0.0	30.8	0.0
A04	823277	837456	4.3	7.5	30.7	0.0	30.7	0.0
A05	823287	837674	4.2	7.5	30.7	0.0	30.8	0.0
A05A	823270	837645	4.2	7.5	30.7	0.0	30.7	0.0
A05B	823309	837726	4.2	7.5	30.7	0.0	30.8	0.1
A06	823405	837870	4.2	7.5	30.7	0.0	30.8	0.1
A06A	823366	837884	4.2	7.5	30.7	0.0	30.8	0.1
A07	823789	837883	3.1	7.5	30.7	0.0	30.8	0.1
A08	823679	837572	2.3	7.5	30.7	0.0	30.7	0.0
A09	823717	837567	3.5	7.5	30.7	0.0	30.7	0.0
A10	823228	837344	4.4	7.5	30.7	0.0	30.7	0.0
A10A	823189	837327	4.4	7.5	30.7	0.0	30.7	0.0
A11	823382	837043	4.5	7.5	30.7	0.0	30.7	0.0
A12	823509	837018	6.5	7.5	30.7	0.0	30.7	0.0
A13	823171	837105	4.6	7.5	30.7	0.0	30.7	0.0
A14	823176	837031	4.4	7.5	30.7	0.0	30.7	0.0
A15	823272	836947	4.1	7.5	30.7	0.0	30.7	0.0
A16	823496	837908	4.2	7.5	30.7	0.0	30.8	0.1
A16A	823470	837872	4.2	7.5	30.7	0.0	30.8	0.1
A17	823501	838152	5.7	7.5	30.7	0.0	30.8	0.0
A18	823726	838016	3.5	7.5	30.7	0.0	30.8	0.1
A19	823750	837460	3.3	7.5	30.7	0.0	30.7	0.0
A20	823745	837355	4.2	7.5	30.7	0.0	30.7	0.0
A21	823714	837274	4.2	7.5	30.7	0.0	30.7	0.0
A22	823645	837066	3.5	7.5	30.7	0.0	30.7	0.0
A23	823921	837887	3.6	7.5	30.7	0.0	30.7	0.0
A24	823928	837924	3.5	7.5	30.7	0.0	30.7	0.0
A25	823756	838085	4.9	7.5	30.7	0.0	30.8	0.1
A26	823041	838099	4.4	7.5	30.7	0.0	30.7	0.0
A27	823466	837090	4.5	7.5	30.7	0.0	30.7	0.0
A28	823287	837864	4.3	7.5	30.7	0.0	30.8	0.1
A29	823279	837827	4.3	7.5	30.7	0.0	30.8	0.1
A30	823293	837535	4.5	7.5	30.7	0.0	30.8	0.0
A31	823394	837960	3.9	7.5	30.7	0.0	30.8	0.1
A32	823353	837069	4.5	7.5	30.7	0.0	30.7	0.0
A33	823439	837932	3.9	7.5	30.7	0.0	30.8	0.1
A34	823425	838140	5.2	7.5	30.7	0.0	30.7	0.0
A35	823581	838166	5	7.5	30.7	0.0	30.8	0.1
A36	823703	837968	3.5	7.5	30.7	0.0	30.8	0.1
A1Pa	823688	837719	3	7.5	30.7	0.0	30.8	0.0
A2Pa	823545	837421	3	7.5	30.8	0.0	30.8	0.1
A3Pa	823455	837785	4	7.5	30.7	0.0	30.8	0.1
A4Pa	823305	837427	4	7.5	30.7	0.0	30.8	0.0
A5Pa	823602	837796	4	7.5	30.7	0.0	31	0
V01	823572	837356	3	7.5	30.7	0.0	30.8	0.1
V02	823780	837738	2.4	7.5	30.7	0.0	30.7	0.0
V03	823525	837232	3	7.5	30.7	0.0	30.7	0.0
V04	823385	837124	4.8	7.5	30.7	0.0	30.7	0.0
Max. FSP Level, ug/m3					30.8	0.1	31.0	0.3
Relevant AQO Criteria, ug/m3					35	35	35	35
Compliance with AQO?					Yes	Yes	Yes	Yes

Remark: * The above results have included the background level extracted from the PATH Output (year 2015). The hour-by-hour background contribution is estimated using output of PATH model, and added hour-by-hour to the Project contribution in order to calculate the annual average total FSP levels.

** The FSP concentrations are calculated based on the predicted RSP concentrations by applying a FSP/RSP ratio of 0.3 according to the USEPA AP-42 reference document. Please refer to Appendix 3-10 for the justification of FSP/RSP ratio.

*** Planned ASR within the planned "Yau Mei Site" Project, which is not applicable in this cumulative impact assessment.