### A) Admiralty Station (ADM)

Works Area	Sources		Parameter	Remarks
Harcourt Garden	Material handling and storage piles Source ID: A1-A3	Percentage active stockpile area Particle size multiplier Moisture content Average wind speed Emission Factor Maximum daily output	91.7 % 0.74 4.8 % 2.9 m/s 0.000497764 kg/Mg 1200 m <sup>3</sup> /day	water suppression 12 times a day k (particle size < 30µm) AP42, Table 13.2.4-1 Annual mean wind speed recorded at HKO headquarter in TST in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] Obtained from Section 4.5, Table 4.1, NEX/1039
		Maximum hourly output Total works area Area of stockpile area Emission Rate	100 m³/hr 250 Mg/hr 8507 m² 851 m² 4.06192E-05 g/m²/s (unmitigated) 3.3714E-06 g/m²/s (mitigated)	South Island Line (East) Preliminary Design Report 12 hours per day Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons From Final Preliminary Design Report
	Wind erosion Source ID: A1-A3	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69533E-06 g/m²/s (unmitigated) 5.39066E-07 g/m²/s (mitigated)	80% stockpile area is covered by imprevious sheet From Final Preliminary Design Report AP42, Table 11.9-4
		Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	Assume 100% works area for construction of cut-and-cover section Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind Erosion Source ID: A4-A11, A18-A20	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m <sup>2</sup> /s	AP42, Table 11.9-4
Hong Kong Park	works	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	Assume 100% works area for construction of cut-and-cover section Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A23-A24	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Table 11.9-4

## B) Nam Fung Tunnel

Works Area	Sources		Parameter	Remarks
Nam Fung Portal	Slope stabilization	Percentage active area	100 %	Assume 100% works area for heavy construction
	works Source ID: A25	Mitigation efficiency	91.7 %	Water suppression 12 times a day
	Source ID. A25	No. of working days per month No. of working hours per day	26 days 12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	
	Mind on sing	D	100.07	
	Wind erosion Source ID: A25	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year	AP42, Section 11.9.4
			2.69533E-06 g/m²/s	,
	Material handling and	Percentage active stockpile area	91.7 %	water suppression 12 times a day
	storage piles	Particle size multiplier	0.74	k (particle size < 30μm)
	Source ID: A28	Moisture content Average wind speed	4.8 % 2.6 m/s	AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk
				Hang in 2008
		Emission Factor Maximum daily output	0.000431889 kg/Mg 1050 m <sup>3</sup> /day	E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From Table 4.1 of Preliminary Design-Draft Final Report
		Maximum hourly output	88 m³/hr	12 hours per day
		Total	219 Mg/hr	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons
		Total works area Area of the stockpile	8587 m <sup>2</sup> 859 m <sup>2</sup>	From final preliminary design report
		Emission Rate	3.05509E-05 g/m²/s (unmitigated)	,
			2.53573E-06 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	100 % (unmitigated)	
	Source ID: A28	Emission Factor	20 % (mitigated) 0.85 Mg/hectare/year	80% stockpiling area is covered by imprevious sheets AP42, Section 11.9.4
		Limbsion Factor	2.69533E-06 g/m²/s (unmitigated)	711 42, 00011011 11.0.4
			5.39066E-07 g/m²/s (mitigated)	
	Heavy construction	Percentage active area	100 %	Assume 100% works area for heavy construction
	(Tunnel box construction)	Mitigation efficiency	91.7 %	Water suppression 12 times a day
	Source ID: A26-A27,	No. of working days per month No. of working hours per day	26 days 12 hours	
	A29	Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	
	Wind erosion Source ID: A26-A27,	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year	AP42, Section 11.9.4
	A29		2.69533E-06 g/m²/s	
	Crushing loading			T
	Source ID: P1a	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques
				for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for RSP	0.000008 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1
		Emission Factor for TSP	0.0000168 kg/Mg	(Source: Truck Unloading - Fragmented Stone) conversion factor = 2.1 (From AP-42, Section 11.19.2
				Table 11.19.2-1, 1/95 ed.)
		Maximum daily output	1100 m <sup>3</sup> /day	Obtained from Section 18.1, Table 18.1, NEX/1039 South Island Line (East) Preliminary Design Report
		Maximum hourly output	92 m³/hr	12 hours per day
			229 Mg/hr 0.001069444 g/s (unmitigated)	Peak output (from engineer)
		Arri e e	1.06944E-05 g/s (mitigated)	
	Secondary crushing Source ID: P1c	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type
				dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for TSP	0.0006 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1
			and the state of t	(assume same as the tertiary crushing (controlled))
		Maximum daily output	1100 m <sup>3</sup> /day	Obtained from Section 18.1, Table 18.1, NEX/1039 South Island Line (East) Preliminary Design Report
		Maximum hourly output	92 m <sup>3</sup> /hr	12 hours per day
			229 Mg/hr 0.038194444 g/s (unmitigated)	Peak output (from engineer)
			0.000381944 g/s (mitigated)	
	Screening Source ID: P1d	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type
				dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for TSP	0.0011 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1
				(assume same as the tertiary crushing (controlled))
		Maximum daily output	1100 m³/day	Obtained from Section 18.1, Table 18.1, NEX/1039 South Island Line (East) Preliminary Design Report
		Maximum hourly output	92 m³/hr	12 hours per day
			229 Mg/hr 0.070023148 g/s (unmitigated)	Peak output (from engineer)
	Loading point from		0.000700231 g/s (mitigated)	
	Loading point from crushing plant to	Mitigation officians	00.0/	Typical removal efficiency for fabric baghouse/cartidge filter type
	stockpile Source ID: P1e	Mitigation efficiency	99 %	dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
	Source ID. F 18	Particle size multiplier	0.74	k (particle size < 30µm)
		Moisture content	4.8 % 2.6 m/s	AP42, Section 13.2.4, Table 13.2.4-1
		Average wind speed	2.0 111/5	Annual mean wind speed recorded at Wong Chuk Hang in 2008
		Emission Factor	0.000431889 kg/Mg	E=k*0.0016*[(U/2.2)^1.3/(M/2^1.4]
		Maximum daily output Maximum hourly output	1100 m <sup>3</sup> /day 92 m <sup>3</sup> /hr	From Table 4.1 of Preliminary Design-Draft Final Report 12 hours per day
			229 Mg/hr	Peak output (from engineer)
		Emission Rate	0.027492914 g/s (unmitigated) 0.000274929 g/s (mitigated)	

# C) Viaduct (Nam Fung Portal - Ocean Park)

Works Area	Sources		Parameter	Remarks
Viaduct Section	Heavy construction Source ID: A30, A34	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	Assume 100% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A30, A34	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.2
	Material handling and storage piles Source ID: A31, A32	Percentage active stockpile area Particle size multiplier Moisture content Average wind speed Emission Factor Maximum daily output Maximum hourly output Total works area Area of the stockpile Emission Rate	91.7 % 0.74 4.8 % 2.6 m/s  0.000431889 kg/Mg 1050 m³/day 88 m³/hr 219 Mg/hr 8587 m² 859 m² 3.05509E-05 g/m²/s (unmitigated) 2.53573E-06 g/m²/s (mitigated)	water suppression 12 times a day k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From Table 4.1 of Preliminary Design-Draft Final Report 12 hours per day Assume capacity of dump truck is 6m³ and 15 tons From final preliminary design report
	Wind erosion Source ID: A31, A32	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69533E-06 g/m²/s (unmitigated) 5.39066E-07 g/m²/s (mitigated)	80% stockpiling area is covered by imprevious sheets AP42, Section 11.9.4

## D) Ocean Park Station (OCP)

Works Area	Sources		Parameter	Remarks
OCP Station	Heavy construction	Percentage active area	100 %	Assume 100% works area for heavy construction
	Source ID: A36-A37	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	
			1.5070E-05 g/m/3 (imagated)	
	Wind erosion	Percentage active area	100 %	
		Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.2
			2.69533E-06 g/m²/s	

### E) Viaduct (From Ocean Park to Wong Chuk Hang)

Works Area	Sources		Parameter	Remarks
WCH - OCP Viaduct	Heavy construction	Percentage active area	100 %	Assume 100% works area for heavy construction
Section	Source ID: A38-A42	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 day	
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated)	
			1.9878E-05 g/m <sup>2</sup> /s (mitigated)	
		Percentage active area	100 %	
	Source ID: A38-A42	Emission Factor	ŭ ,	AP42, Section 11.9.2
			2.69533E-06 g/m²/s	

# F) Wong Chuk Hang Station (WCH)

Works Area	Sources		Parameter	Remarks
WCH Station	Heavy construction	Percentage active area	100 %	Assume 100% works area for heavy construction
	Source ID: A43-A44	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated)	
			1.9878E-05 g/m <sup>2</sup> /s (mitigated)	
		Percentage active area	100 %	
	Source ID: A43-A44	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.4
			2.69533E-06 g/m²/s	

## G) Wong Chuk Hang Depot

Works Area	Sources		Parameter	Remarks
Crushing Activities	Crushing loading Source ID: P2a	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for RSP Emission Factor for TSP	0.000008 kg/Mg 0.0000168 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1 (Source: Truck Unloading - Fragmented Stone) conversion factor = 2.1 (From AP-42, Section 11.19.2
			313 Mg/hr 0.001458333 g/s (unmitigated)	Table 11.19.2-1, 1/95 ed.) Peak output: 1500m³/day (from design engineer)
	Secondary crushing Source ID: P2c	Mitigation efficiency	1.45833E-05 g/s (mitigated)  99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques
				for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for TSP	0.0006 kg/Mg 313 Mg/hr	AP42, Section 11.19.2, Table 11-19.2-1 (assume same as the tertiary crushing (controlled)) Peak output: 1500m³/day (from design engineer)
	Screening		0.052083333 g/s (unmitigated) 0.000520833 g/s (mitigated)	
	Source ID: P2d	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for TSP	0.0011 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1 (assume same as the tertiary crushing (controlled))
			313 Mg/hr 0.095486111 g/s (unmitigated) 0.000954861 g/s (mitigated)	Peak output: 1500m <sup>3</sup> /day (from design engineer)
	Loading point from crushing plant to stockpile Source ID: P2e	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Particle size multiplier Moisture content	0.74 4.8 %	k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1
		Average wind speed Emission Factor	2.6 m/s 0.000431889 kg/Mg	Annual mean wind speed recorded at Wong Chuk Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2^1.4]
		Emission Rate	313 Mg/hr 0.037490338 g/s (unmitigated) 0.000374903 g/s (mitigated)	Peak output: 1500m <sup>3</sup> /day (from design engineer)
Heavy Construction	Site Formation (Zones C, D & E) + Piling (Zone A) Source ID: A46-A47	Mitigation efficiency No. of working days per month	100 % 91.7 % 26 days	Assume 100% works area for heavy construction Water suppression 12 times a day
	A48a-b, A49a-f, A50a-f, A51a-d A52a-c	No. of working hours per day Emission Factor	12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	AP42, Section 13.2.3.3
	Wind erosion Source ID: A46-A47 A48a-b, A49a-f, A50a-f, A51a-d A52a-c	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	Assume 100% works area for heavy construction AP42, Section 11.9.4
Modification of existing	Heavy construction Source ID: A45, A56	Percentage active area Mitigation efficiency	100 % 91.7 %	Assume 100% active area for heavy construction Water suppression 12 times a day
Staunton Creek nullah between	,	No. of working days per month No. of working hours per day Emission Factor	26 days 12 hour 2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
Ocean Park Road and Nam Long			0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	,,,,,,
Shan Road	Wind erosion Source ID: A45, A56	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.2
	Material handling and storage piles Source ID: A49g	Percentage active stockpile area Particle size multiplier Moisture content Average wind speed	91.7 % 0.74 4.8 % 2.6 m/s	water suppression 12 times a day k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk
		Emission Factor Maximum daily output Maximum hourly output	0.000431889 kg/Mg 1050 m <sup>3</sup> /day 88 m <sup>3</sup> /hr	Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From Table 4.1 of Preliminary Design-Draft Final Report 12 hours per day
		Total works area Area of the stockpile Emission Rate	219 Mg/hr 8587 m <sup>2</sup> 859 m <sup>2</sup> 3.05509E-05 g/m <sup>2</sup> /s (unmitigated) 2.53573E-06 g/m <sup>2</sup> /s (mitigated)	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons  From final preliminary design report
	Wind erosion Source ID: A49g	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69533E-06 g/m²/s (unmitigated) 5.39066E-07 g/m²/s (mitigated)	80% stockpiling area is covered by imprevious sheets AP42, Section 11.9.4
<u> </u>	l	l		

### H) Viaduct (From WCH to ALC Bridge)

Works Area	Sources		Parameter	Remarks
Viaduct Section	Heavy construction Source ID: A57-A59, A61a, A61b	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	Assume 100% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A57-A59, A61a, A61b	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.4
Temporary Bridge (From WCH - ALC Bridge)	Heavy construction Source ID: A60, A62	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m³/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	Assume 100% works area for heavy construction Water suppression 12 times a day AP42, Section 13.2.3.3
	Wind erosion Source ID: A60, A62	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.4

## I) ALC Bridge

Works Area	Sources		Parameter	Remarks
ALC Bridge	Heavy construction	Percentage active area	100 %	Assume 100% works area for heavy construction
-	Source ID: A63	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated)	
			1.9878E-05 g/m <sup>2</sup> /s (mitigated)	
	Wind Erosion	Percentage active area	100 %	
	Source ID: A63	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.4
			2.69533E-06 g/m <sup>2</sup> /s	

### J) Tunnel (From ALC Bridge to LET Station)

Works Area	Sources		Parameter	Remarks
Cut-and-cover	Heavy construction	Percentage active area	100 %	Assume 100% works area for heavy construction
Tunnel	(Tunnel portal)	Mitigation efficiency	91.7 %	Water suppression 12 times a day
	Source ID: A64-A67	No. of working days per month	26 days	
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m <sup>2</sup> /s (unmitigated)	
			1.9878E-05 g/m <sup>2</sup> /s (mitigated)	
	Wind erosion	Percentage active area	100 %	
	Source ID: A64-A67	Emission Factor	ů ,	AP42, Section 11.9.4
			2.69533E-06 g/m²/s	

## K) Lei Tung Station (LET)

Works Area	Sources		Parameter	Remarks
Cut-and-cover and	Heavy construction	Percentage active area	100 %	Assume 100% active area for heavy construction
demolish sitting-out area	Source ID: A68	Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A68	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.4
LET Ventilation Building and Entrances	Heavy construction for entrance shaft and ventilation building Source ID: A69, A71	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	Assume 100% active area for heavy construction Water suppression 12 times a day AP42, Section 13.2.3.3
	Wind erosion Source ID: A69, A71	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.4
Slope Stabilization Works	Heavy construction on the existing slope Source ID: A70	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	Assume 100% active area for heavy construction Water suppression 12 times a day AP42, Section 13.2.3.3
	Wind Erosion Source ID: A70	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.4

### L) South Horizon Station (SOH)

Works Area	Sources		Parameter	Remarks
SOH Station,	Heavy construction	Percentage active area	100 %	Assume 100% active area for heavy construction
Entrances and	Source ID: A76-A78,	Mitigation efficiency	91.7 %	Water suppression 12 times a day
Ventilation Building	A80, A82-A83	No. of working days per month	26 days	
	A02-A03	No. of working hours per day Emission Factor	12 hours	AP42, Section 13.2.3.3
		Emission Factor	2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated)	AP42, Section 13.2.3.3
			1.9878E-05 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	100 %	
	Source ID: A76-A78,	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.2
	A80, A82-A83		2.69533E-06 g/m²/s	
Cut-and-cover	Heavy construction	Percentage active area	100 %	Assume 100% active area for heavy construction
	Source ID: A79, A81	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	
			1.507 SE 00 g/m /5 (imagated)	
	Wind erosion	Percentage active area	100 %	
	Source ID: A79, A81	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.2
			2.69533E-06 g/m²/s	
Slope Stabilization	Heavy construction	Percentage active area	100 %	Assume 100% active area for heavy construction
Works	Source ID: A74-A75	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	Water suppression 12 amos a day
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated)	
			1.9878E-05 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	100 %	
	Source ID: A74-A75	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.2
			2.69533E-06 g/m²/s	
	Material handling and	Percentage active stockpile area	91.7 %	water suppression 12 times a day
	storage piles	Particle size multiplier	0.74	k (particle size < 30µm)
	Source ID: A75a	Moisture content	4.8 %	AP42, Section 13.2.4, Table 13.2.4-1
		Average wind speed	2.6 m/s	Annual mean wind speed recorded at Wong Chuk
		Emission Faster	0.000404000 km/Mm	Hang in 2008
		Emission Factor Maximum daily output	0.000431889 kg/Mg 1050 m <sup>3</sup> /day	E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From Table 4.1 of Preliminary Design-Draft Final Report
		Maximum hourly output	88 m³/hr	12 hours per day
		January Surput	219 Mg/hr	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons
		Total works area	8587 m <sup>2</sup>	and to tollo
		Area of the stockpile	859 m <sup>2</sup>	From final preliminary design report
		Emission Rate	3.05509E-05 g/m²/s (unmitigated)	
			2.53573E-06 g/m <sup>2</sup> /s (mitigated)	
	Wind erosion	Percentage active area	100 % (unmitigated)	
	Source ID: A75a	i ciccinage active area	20 % (mitigated)	80% stockpiling area is covered by imprevious sheets
		Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.4
			2.69533E-06 g/m²/s (unmitigated)	
			5.39066E-07 g/m <sup>2</sup> /s (mitigated)	

## M) Telegraph Bay Barging Point

Throughput from WCH Depot and Nam Fung Portal

Works Area	NCH Depot and Nam Fu Sources	1	Parameter	Remarks
Stockpile Area	Material handling and storage piles Source ID: A85	Percentage active stockpile area Particle size multiplier Moisture content Average wind speed Emission Factor Maximum daily output Maximum hourly output Total stockpile area	91.7 % 0.74 4.8 % 2.6 m/s 0.000431889 kg/Mg 1500 m <sup>3</sup> /day 150 m <sup>3</sup> /hr 375 Mg/hr 200 m <sup>2</sup>	water suppression 12 times a day k (particle size < 30µm) AP42, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] Obtained from engineer 10 hours per day Assume capacity of dump truck is 6m³ and 15 tons
		Emission Rate	0.000224942 g/m²/s (unmitigated) 1.86702E-05 g/m²/s (mitigated)	
	Wind erosion Source ID: A85	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69533E-06 g/m²/s (unmitigated) 5.39066E-07 g/m²/s (mitigated)	80% stockpiling area is covered by imprevious sheets AP42, Table 11.9-4
Barging Point	Unloading of spoils to barge Source ID: P3	Mitigation efficiency	50 %	3-side with top cover and water spraying system to be provided (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Particle size multiplier Moisture content Average wind speed Emission Factor Maximum daily output Maximum hourly output Emission Rate	0.74 4.8 % 2.6 m/s  0.000431889 kg/Mg 1500 m³/day 150 m³/hr 375 Mg/hr 0.044988405 g/s (unmitigated) 0.022494203 g/s (mitigated)	spray at point of spoil dumping k (particle size < 30µm) AP42, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] Obtained from engineer 10 hours per day Assume capacity of dump truck is 6m³ and 15 tons

## N) Lee Nam Road Barging Point

Mainly from Ap Lei Chau Work Site (With Conveyor Belt)

Works Area	Chau Work Site (With	i Conveyor Beit)	Parameter	Domarko
Spoil Disposal	Sources Material handling	Percentage active stockpile area	Parameter 91.7 %	Remarks water suppression 12 times a day
Spoil Disposal	and storage piles	Particle size multiplier	0.74	k (particle size < 30µm)
	Source ID: A87	Moisture content	4.8 %	AP42, Table 13.2.4-1
	Source ID: A87			Annual mean wind speed recorded at Wong Chuk
		Average wind speed	2.6 m/s	Hang in 2008
		Emission Factor	0.000431889 kg/Mg	E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4]
				Obtained from Section 4.5, Table 4.1, NEX/1039
		Maximum daily output	1200 m <sup>3</sup> /day	South Island Line (East) Preliminary Design Report
		Maximum hourly output	100 m <sup>3</sup> /hr	12 hours per day
			250 Mg/hr	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons
		Total Works Area	450 m <sup>2</sup>	
		Stockpile area	45 m <sup>2</sup>	
		Emission Rate	0.000666495 g/m²/s (unmitigated)	
			5.53191E-05 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	100 % (unmitigated)	
	Source ID: A87	l committee and a committee an	20 % (mitigated)	80% stockpiling area is covered by imprevious sheets
		Emission Factor	0.85 Mg/hectare/year	AP42, Table 11.9-4
			2.69533E-06 g/m²/s (unmitigated)	, ,
			5.39066E-07 g/m²/s (mitigated)	
	ļ			
LWS Ventilation	Heavy construction	Percentage active area	100 %	Assume 100% active area for heavy construction
Building	Source ID: A86	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated)	
			1.9878E-05 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	100 %	
	Source ID: A86	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.2
	Course ID. 7100	Limbolon Factor	2.69533E-06 g/m²/s	711 42, 0001011 11.5.2
Slope Stabilization	Heavy construction	Percentage active area	100 %	Assume 100% active area for heavy construction
Works	Source ID: A72-A73	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	,
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			0.000239494 g/m²/s (unmitigated)	
			1.9878E-05 g/m <sup>2</sup> /s (mitigated)	
	Mind on a	Daniel de la contraction de la	100.07	
	Wind erosion Source ID: A72-A73	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year	AP42, Section 11.9.2
	Source ID. A72-A73	Emission Factor	2.69533E-06 g/m²/s	AF42, 50011011 11.9.2
			2.00000E-00 g/m /3	
Barging Point	Unloading of spoils			3-side with top cover and water spraying system to be provided
	to barge	Mitigation efficiency	50 %	(From Control Techniques for Particulate Emissions from
	Source ID: P6			Stationary Sources Vol.2)
		Particle size multiplier	0.74	k (particle size < 30µm)
		Moisture content	4.8 %	AP42, Table 13.2.4-1
		Average wind speed	2.6 m/s	Annual mean wind speed recorded at Wong Chuk
		The rain of the ra		Hang in 2008
		Emission Factor	0.000431889 kg/Mg	AP42, Section 13.2.4
		Maximum daily output	1440 m <sup>3</sup> /day	Assume 240 truck trips per day
		Maximum hourly output	,	(Spoils to barge transferred from road traffic)
		Maximum hourly output	120 m³/hr	12 hours per day
			300 Mg/hr	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons
		Maximum daily autout	1200 3/-1	Obtained from Section 4.5, Table 4.1, NEX/1039 South Island Line (East) Preliminary Design Report
		Maximum daily output	1200 m <sup>3</sup> /day	(Spoils to barge transferred from conveyor belt)
		Maximum hourly output	100 m <sup>3</sup> /hr	12 hours per day
		Total maxmium hourly output	400 m <sup>3</sup> /hr	and the seat
		Emission Rate	0.047987632 g/s (unmitigated)	
			0.023993816 g/s (mitigated)	
			3-( 3	

### O) Chung Hom Kok Magazine Site

Works Area	Sources		Parameter	Remarks
Magazine Site	Heavy construction Source ID: A88	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hour	Assume 100% active area for heavy construction Water suppression 12 times a day AP42, Section 13.2.3.3
	Wind Erosion Source ID: A88	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.2

### P) Concurrent Projects - Essential Public infrastructure Works (EPIW)

Description Modification of	Sources Heavy construction	Percentage active area	Parameter 100 %	Remarks Assume 100% active area for heavy construction
Roads and U-turn Lanes at Wong Chuk Hang	Source ID: A33, A35	Mitigation efficiency No. of working days per month No. of working hours per day	100 % 91.7 % 26 days 12 hours	Assume 100% active area for heavy construction Water suprression 12 times a day
		Emission Factor	2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated) 1.9878E-05 g/m²/s (mitigated)	AP42, Section 13.2:3.3
	Wind erosion Source ID: A33, A35	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.2
Widening of Heung Yip Road and associated road improvement works Public Transport Interchange (PTI)	Heavy construction Source ID: A54-A55	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hour 2.69 Mg/hectare/month of activity 0.000239494 g/m³/s (unmitigated)	Assume 100% active area for heavy construction Water suprression 12 times a day  AP42, Section 13.2.3.3
underneath Wong Chuk Hang (WCH) Station	Wind erosion Source ID: A54-A55	Percentage active area Emission Factor	1.9878E-05 g/m²/s (mitigated)  100 %  0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.2
Footbridge connecting to Heung Yip Road and WCH Road Footbridge				
Connecting to Ap Lei Chau Estate				
Footbridge (with Lift) over Ap Lei	Heavy construction Source ID: A84	Percentage active area Mitigation efficiency	100 % 91.7 %	Assume 100% active area for heavy construction Water suprression 12 times a day
Chau Bridge Road		No. of working days per month No. of working hours per day Emission Factor	26 days 26 days 12 hours 2.69 Mg/hectare/month of activity 0.000239494 g/m <sup>2</sup> /s (urmitigated) 1.9878E-05 g/m <sup>2</sup> /s (mitigated)	AP42, Section 13.2.3.3
	Wind erosion Source ID: A84	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.2
Wan Chai Development Phase and Central- Wan Chai Bypass	Heavy construction Source ID: A12a, A12b	Emission Factor	6.23E-05 g/m²/s (mitigated)	Extract from EIA report of Wan Chai Development Phase II and Central-Wan Chai Bypass (Appendix 3.1 p.7 Scenario 3, (HKCEC2E)), assume 100% active area
,	Wind erosion Source ID: A12a, A12b Heavy construction	Emission Factor  Emission Factor	2.70E-06 g/m²/s  6.23E-05 g/m²/s (mitigated)	Extract from EIA report of Wan Chai Development Phase II and Central-Wan Chai Bypass (Appendix 3.1 p.8 Scenario 3, ((HKCEC2E)), assume 100% active area Extract from EIA report of Wan Chai Development Phase II and
	Source ID: A13 Wind erosion	Emission Factor	2.70E-06 g/m²/s	Central-Wan Chai Bypass (Appendix 3.1 p.7 Scenario 3, (HKCEC2W)), assume 100% active area  Extract from EIA report of Wan Chai Development Phase II and
HATS Stage 2A	Source ID: A13 Heavy construction	Emission Factor	2.08E-04 (Unmitigated)	Central-Wan Chai Bypass (Appendix 3.1 p.8 Scenario 3, (HKCEC2W)), assume 100% active area  Extract from EIA report of HATS Stage 2A
	Source ID: A85a (Cyberport drop shaft)	Emissori actor	2.00L-04 (Oriningaled)	Appendix 3.1, (source ID: CB-N-1), assume 100% active area
	Wind erosion Source ID: A85a (Cyberport drop shaft)	Emission Factor	2.70E-06 (Unmitigated)	Extract from EIA report of HATS Stage 2A Appendix 3.1, (source ID: CB-N-1), assume 100% active area
Reprovisioning of Bus Terminal	Heavy construction Source ID: A57a	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hour 2.69 Mg/rectare/month of activity 0.000239494 g/m <sup>2</sup> /s (unmitigated) 1.9878E-05 g/m <sup>2</sup> /s (mitigated)	Assume 100% active area for heavy construction Water suprression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A57a	Percentage active area Emission Factor	100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.2
HK West Drainage Tunnel	Heavy construction Source ID: A89-93	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	100 % 91.7 % 26 days 12 hour 2.69 Mg/hectare/month of activity 0.000239494 g/m²/s (unmitigated)	Assume 100% active area for heavy construction Water suprression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A89-93	Percentage active area Emission Factor	1.9878E-05 g/m²/s (mitigated) 100 % 0.85 Mg/hectare/year 2.69533E-06 g/m²/s	AP42, Section 11.9.2
	Unloading of spoils to barge Source ID: P7	Mitigation efficiency	50 %	Assume 3-side with top cover and water spraying system to be provided (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Particle size multiplier Moisture content Average wind speed	0.74 4.8 % 2.6 m/s	spray at point of spoil dumping k (particle size < 30µm) AP42, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008
		Emission Factor Maximum daily output Maximum hourly output Emission Rate	0.000431889 kg/Mg 1500 m³/day 150 m³/hr 375 Mg/hr 0.044988405 g/s (unmitigated)	E=k*0.0016*[(U/2.2)*1.3/(M/2)*1.4] Obtained from engineer 10 hours per day Assume capacity of dump truck is 6m³ and 15 tons
			0.022494203 g/s (mitigated)	

### A) Admiralty Station (ADM)

Works Area	Sources		Parameter	Remarks
Harcourt Garden	Material handling and	Percentage active stockpile area	91.7 %	water suppression 12 times a day
	storage piles	Particle size multiplier	0.74	k (particle size < 30µm)
	Source ID: A1-A3	Moisture content	4.8 %	AP42, Table 13.2.4-1
		Average wind speed	2.9 m/s	Annual mean wind speed recorded at HKO
				headquarter in TST in 2008
		Emission Factor	0.000497764 kg/Mg	E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4]
		Maximum daily output	1200 m <sup>3</sup> /day	
		maximum daily daipat	so iii /day	Obtained from Section 4.5, Table 4.1, NEX/1039 South Island Line (East) Preliminary Design Report
		Maximum hourly output	100 m <sup>3</sup> /hr	12 hours per day
		, ,	250 Mg/hr	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons
		Total works area	8507 m <sup>2</sup>	recume capacity of damp track to one and to tone
		Area of stockpile area	851 m <sup>2</sup>	From Final Preliminary Design Report
				From Final Preliminary Design Report
		Emission Rate	4.06192E-05 g/m²/s (unmitigated)	
			3.3714E-06 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	100 % (unmitigated)	
	Source ID: A1-A3		20 % (mitigated)	80% stockpile area is covered by imprevious sheet
		Emission Factor	0.85 Mg/hectare/year	From Final Preliminary Design Report
			2.69533E-06 g/m²/s (unmitigated)	AP42, Table 11.9-4
			5.39066E-07 g/m <sup>2</sup> /s (mitigated)	
			3 ( · · g,	
	Heavy construction	Percentage active area	6 %	Assume 6% works area for construction of cut-and-cover
	(Cut-and-cover		0.4 7.04	section
	section and demolish		91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	
		No. of working hours per day	12 hours	
	A18-A20	Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			1.43697E-05 g/m²/s (unmitigated)	
			1.19268E-06 g/m²/s (mitigated)	
	Wind Erosion	Percentage active area	6 %	
	Source ID: A4-A11,	Emission Factor	0.85 Mg/hectare/year	AP42, Table 11.9-4
	A18-A20		1.6172E-07 g/m <sup>2</sup> /s	
			,	
Hong Kong Park	Heavy construction	Percentage active area	6 %	Assume 6% works area for construction of cut-and-cover
	(Construction/	NAIAI	04.7.0/	section
	ventilation shafts) and		91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	
	works	No. of working hours per day	12 hours	
	Source ID: A23-A24	Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			1.43697E-05 g/m²/s (unmitigated)	
			1.19268E-06 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	6 %	
	Source ID: A23-A24	Emission Factor	0.85 Mg/hectare/year	AP42, Table 11.9-4
			1.6172E-07 g/m²/s	
	1		3,	

## B) Nam Fung Tunnel

Works Area	Sources Slone stabilization	Porcontago activo area	Parameter 6 %	Remarks  Assume 69/ works area for beaut construction
lam Fung Portal	Slope stabilization works Source ID: A25	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day	6 % 91.7 % 26 days 12 hours	Assume 6% works area for heavy construction Water suppression 12 times a day
		Emission Factor	2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	AP42, Section 13.2.3.3
	Wind erosion Source ID: A25	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m <sup>2</sup> /s	AP42, Section 11.9.4
	Material handling and	Percentage active stockpile area	91.7 %	water suppression 12 times a day
	storage piles Source ID: A28	Particle size multiplier Moisture content Average wind speed	0.74 4.8 % 2.6 m/s	k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk
		Emission Factor Maximum daily output Maximum hourly output	0.000431889 kg/Mg 1050 m <sup>3</sup> /day 88 m <sup>3</sup> /hr	Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From Table 4.1 of Preliminary Design-Draft Final Report 12 hours per day
		Total works area Area of the stockpile Emission Rate	219 Mg/hr 8587 m <sup>2</sup> 859 m <sup>2</sup> 3.05509E-05 g/m <sup>2</sup> /s (unmitigated) 2.53573E-06 g/m <sup>2</sup> /s (mitigated)	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons  From final preliminary design report
	Wind erosion Source ID: A28	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69533E-06 g/m²/s (unmitigated) 5.39066E-07 g/m²/s (mitigated)	80% stockpiling area is covered by imprevious sheets AP42, Section 11.9.4
	Heavy construction (Tunnel box construction) Source ID: A26-A27,	Percentage active area Mitigation efficiency No. of working days per month	6 % 91.7 % 26 days	Assume 6% works area for heavy construction Water suppression 12 times a day
	A29	No. of working hours per day Emission Factor	12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	AP42, Section 13.2.3.3
	Wind erosion Source ID: A26-A27, A29	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.4
	Crushing loading Source ID: P1a	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter typ dust extraction and collection system (From Control Technique for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for RSP	0.000008 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1
		Emission Factor for TSP	0.0000168 kg/Mg	(Source: Truck Unloading - Fragmented Stone) conversion factor = 2.1 (From AP-42, Section 11.19.2 Table 11.19.2-1, 1/95 ed.) Obtained from Section 18.1, Table 18.1, NEX/1039
		Maximum daily output  Maximum hourly output	1100 m <sup>3</sup> /day 92 m <sup>3</sup> /hr 229 Mg/hr 0.001069444 g/s (unmitigated)	South Island Line (East) Preliminary Design Report 12 hours per day Peak output (from engineer)
	Secondary crushing Source ID: P1c	Mitigation efficiency	1.06944E-05 g/s (mitigated) 99 %	Typical removal efficiency for fabric baghouse/cartidge filter tyl dust extraction and collection system (From Control Technique for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for TSP	0.0006 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1 (assume same as the tertiary crushing (controlled))
		Maximum daily output	1100 m <sup>3</sup> /day	Obtained from Section 18.1, Table 18.1, NEX/1039 South Island Line (East) Preliminary Design Report
		Maximum hourly output	92 m³/hr 229 Mg/hr 0.038194444 g/s (unmitigated) 0.000381944 g/s (mitigated)	12 hours per day Peak output (from engineer)
	Screening Source ID: P1d	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Technique for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for TSP	0.0011 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1 (assume same as the tertiary crushing (controlled)) Obtained from Section 18.1, Table 18.1, NEX/1039
		Maximum daily output  Maximum hourly output	1100 m <sup>3</sup> /day 92 m <sup>3</sup> /hr 229 Mg/hr 0.070023148 g/s (unmitigated)	South Island Line (East) Preliminary Design Report 12 hours per day Peak output (from engineer)
	Loading point from crushing plant to stockpile Source ID: P1e	Mitigation efficiency	0.000700231 g/s (mitigated) 99 %	Typical removal efficiency for fabric baghouse/cartidge filter typi dust extraction and collection system (From Control Technique for Particulate Emissions from Stationary Sources Vol.2)
		Particle size multiplier Moisture content Average wind speed	0.74 4.8 % 2.6 m/s	k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008
		Emission Factor Maximum daily output Maximum hourly output	0.000431889 kg/Mg 1100 m <sup>3</sup> /day 92 m <sup>3</sup> /hr 229 Mg/hr	E=k*0.0016*[(U/2.2)^1.3/(M/2^1.4] From Table 4.1 of Preliminary Design-Draft Final Report 12 hours per day Peak output (from engineer)
		Emission Rate	0.027492914 g/s (unmitigated)	i can output (nom engineer)

## C) Viaduct (Nam Fung Portal - Ocean Park)

Works Area	Sources		Parameter	Remarks
Viaduct Section	Heavy construction Source ID: A30, A34	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A30, A34	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.2
	Material handling and storage piles Source ID: A31, A32	Percentage active stockpile area Particle size multiplier Moisture content Average wind speed Emission Factor Maximum daily output Maximum hourly output Total works area Area of the stockpile Emission Rate	91.7 % 0.74 4.8 % 2.6 m/s  0.000431889 kg/Mg 1050 m³/day 88 m³/hr 219 Mg/hr 8587 m² 859 m² 3.05509E-05 g/m²/s (unmitigated) 2.53573E-06 g/m²/s (mitigated)	water suppression 12 times a day k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From Table 4.1 of Preliminary Design-Draft Final Report 12 hours per day Assume capacity of dump truck is 6m³ and 15 tons From final preliminary design report
	Wind erosion Source ID: A31, A32	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69533E-06 g/m²/s (unmitigated) 5.39066E-07 g/m²/s (mitigated)	80% stockpiling area is covered by imprevious sheets AP42, Section 11.9.4

## D) Ocean Park Station (OCP)

Works Area	Sources		Parameter	Remarks
OCP Station	Source ID: A36-A37	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	91.7 % 26 days 12 hours	Assume 6% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A36-A37	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m <sup>2</sup> /s	AP42, Section 11.9.2

### E) Viaduct (From Ocean Park to Wong Chuk Hang)

Works Area	Sources		Parameter	Remarks
WCH - OCP Viaduct	Heavy construction	Percentage active area	6 %	Assume 6% works area for heavy construction
Section	Source ID: A38-A42	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 day	
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			1.43697E-05 g/m²/s (unmitigated)	
			1.19268E-06 g/m <sup>2</sup> /s (mitigated)	
		Percentage active area	6 %	
	Source ID: A38-A42	Emission Factor	3 ,	AP42, Section 11.9.2
			1.6172E-07 g/m²/s	

# F) Wong Chuk Hang Station (WCH)

Works Area	Sources		Parameter	Remarks
WCH Station	Source ID: A43-A44	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m <sup>2</sup> /s (unmitigated) 1.19268E-06 g/m <sup>2</sup> /s (mitigated)	Assume 6% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A43-A44	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.4

### G) Wong Chuk Hang Depot

Works Area	Sources		Parameter	Remarks
Crushing Activities	Crushing loading Source ID: P2a	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for RSP Emission Factor for TSP	0.000008 kg/Mg 0.0000168 kg/Mg	AP42, Section 11.19.2, Table 11-19.2-1 (Source: Truck Unloading - Fragmented Stone) conversion factor = 2.1 (From AP-42, Section 11.19.2
			313 Mg/hr 0.001458333 g/s (unmitigated) 1.45833E-05 g/s (mitigated)	Table 11.19.2-1, 1/95 ed.) Peak output: 1500m <sup>3</sup> /day (from design engineer)
	Secondary crushing Source ID: P2c	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for TSP	0.0006 kg/Mg 313 Mg/hr	AP42, Section 11.19.2, Table 11-19.2-1 (assume same as the tertiary crushing (controlled)) Peak output: 1500m <sup>3</sup> /day (from design engineer)
			0.052083333 g/s (unmitigated) 0.000520833 g/s (mitigated)	
	Screening Source ID: P2d	Mitigation efficiency	99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Emission Factor for TSP	0.0011 kg/Mg 313 Mg/hr 0.095486111 g/s (unmitigated)	AP42, Section 11.19.2, Table 11-19.2-1 (assume same as the tertiary crushing (controlled)) Peak output: 1500m³/day (from design engineer)
	Loading point from crushing plant to stockpile Source ID: P2e	Mitigation efficiency	0.000954861 g/s (mitigated) 99 %	Typical removal efficiency for fabric baghouse/cartidge filter type dust extraction and collection system (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2)
		Particle size multiplier Moisture content Average wind speed	0.74 4.8 % 2.6 m/s	k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008
		Emission Factor	0.000431889 kg/Mg	E=k*0.0016*[(U/2.2)^1.3/(M/2^1.4]
		Emission Rate	313 Mg/hr 0.037490338 g/s (unmitigated) 0.000374903 g/s (mitigated)	Peak output: 1500m <sup>3</sup> /day (from design engineer)
Heavy Construction	Site Formation (Zones C, D & E) + Piling (Zone A) Source ID: A46-A47 A48a-b, A49a-f, A50a-f, A51a-d A52a-c	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A46-A47 A48a-b, A49a-f, A50a-f, A51a-d A52a-c	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	Assume 6% works area for heavy construction AP42, Section 11.9.4
existing Staunton Creek nullah between Ocean Park Road and	Heavy construction Source ID: A45, A56	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hour 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% active area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
Nam Long Shan Road	Wind erosion Source ID: A45, A56	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.2
	Material handling and storage piles Source ID: A49g	Percentage active stockpile area Particle size multiplier Moisture content Average wind speed	91.7 % 0.74 4.8 % 2.6 m/s	water suppression 12 times a day k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008
		Emission Factor Maximum daily output Maximum hourly output	0.000431889 kg/Mg 1050 m <sup>3</sup> /day 88 m <sup>3</sup> /hr 219 Mg/hr	Fehr 7.0016*[(U/2.2)^1.3/(M/2)^1.4] From Table 4.1 of Preliminary Design-Draft Final Report 12 hours per day Assume capacity of dump truck is 6m³ and 15 tons
		Total works area Area of the stockpile Emission Rate	8587 m <sup>2</sup> 859 m <sup>2</sup> 3.05509E-05 g/m <sup>2</sup> /s (unmitigated) 2.53573E-06 g/m <sup>2</sup> /s (mitigated)	From final preliminary design report
	Wind erosion Source ID: A49g	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69533E-06 g/m²/s (unmitigated) 5.39066E-07 g/m²/s (mitigated)	80% stockpiling area is covered by imprevious sheets AP42, Section 11.9.4

### H) Viaduct (From WCH to ALC Bridge)

Works Area	Sources		Parameter	Remarks
Viaduct Section	Heavy construction Source ID: A57-A59, A61a, A61b	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A57-A59, A61a, A61b	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.4
Temporary Bridge (From WCH - ALC Bridge)	Heavy construction Source ID: A60, A62	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A60, A62	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.4

### I) ALC Bridge

Works Area	Sources	Parameter		Remarks
ALC Bridge	Source ID: A63	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated)	Assume 6% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind Erosion Source ID: A63	Percentage active area Emission Factor	1.19268E-06 g/m²/s (mitigated)  6 %  0.85 Mg/hectare/year  1.6172E-07 g/m²/s	AP42, Section 11.9.4

### J) Tunnel (From ALC Bridge to LET Station)

Works Area	Sources	Parameter		Remarks
Cut-and-cover Tunnel	Heavy construction (Tunnel portal) Source ID: A64-A67	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	91.7 % 26 days 12 hours	Assume 6% works area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A64-A67	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.4

## K) Lei Tung Station (LET)

Works Area	Sources		Parameter	Remarks
Cut-and-cover and	Heavy construction	Percentage active area	6 %	Assume 6% active area for heavy construction
demolish sitting-out area	Source ID: A68	Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A68	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.4
LET Ventilation Building and Entrances	Heavy construction for entrance shaft and ventilation building Source ID: A69, A71	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% active area for heavy construction Water suppression 12 times a day AP42, Section 13.2.3.3
	Wind erosion Source ID: A69, A71	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.4
Slope Stabilization Works	Heavy construction on the existing slope Source ID: A70	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% active area for heavy construction Water suppression 12 times a day AP42, Section 13.2.3.3
	Wind Erosion Source ID: A70	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.4

### L) South Horizon Station (SOH)

Works Area	Sources		Parameter	Remarks
SOH Station, Entrances and Ventilation Building	Heavy construction Source ID: A76-A78, A80, A82-A83	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% active area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A76-A78, A80, A82-A83	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.2
Cut-and-cover	Heavy construction Source ID: A79, A81	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% active area for heavy construction Water suppression 12 times a day  AP42, Section 13.2.3.3
	Wind erosion Source ID: A79, A81	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.2
Slope Stabilization Works	Heavy construction Source ID: A74-A75	Percentage active area Mitigation efficiency No. of working days per month No. of working hours per day Emission Factor	6 % 91.7 % 26 days 12 hours 2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	Assume 6% active area for heavy construction Water suppression 12 times a day AP42, Section 13.2.3.3
	Wind erosion Source ID: A74-A75	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year 1.6172E-07 g/m¾s	AP42, Section 11.9.2
	Material handling and storage piles Source ID: A75a	Percentage active stockpile area Particle size multiplier Moisture content Average wind speed Emission Factor Maximum daily output Maximum hourly output Total works area Area of the stockpile Emission Rate	91.7 % 0.74 4.8 % 2.6 m/s  0.000431889 kg/Mg 1050 m³/day 88 m³/hr 219 Mg/hr 8587 m² 859 m² 3.05509E-05 g/m²/s (unmitigated) 2.53573E-06 g/m²/s (mitigated)	water suppression 12 times a day k (particle size < 30µm) AP42, Section 13.2.4, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From Table 4.1 of Preliminary Design-Draft Final Report 12 hours per day Assume capacity of dump truck is 6m³ and 15 tons From final preliminary design report
	Wind erosion Source ID: A75a	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69538E-06 g/m²/s (unmitigated) 5.39066E-07 g/m²/s (mitigated)	80% stockpiling area is covered by imprevious sheets AP42, Section 11.9.4

## M) Telegraph Bay Barging Point

Throughput from WCH Depot and Nam Fung Portal

Works Area	Sources		Parameter	Remarks
Stockpile Area	Material handling and storage piles Source ID: A85	Percentage active stockpile area Particle size multiplier Moisture content Average wind speed Emission Factor Maximum daily output Maximum hourly output Total stockpile area Emission Rate	91.7 % 0.74 4.8 % 2.6 m/s  0.000431889 kg/Mg 1500 m³/day 150 m³/hr 375 Mg/hr 200 m²  0.000224942 g/m²/s (unmitigated) 1.86702E-05 g/m²/s (mitigated)	water suppression 12 times a day k (particle size < 30µm) AP42, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] Obtained from engineer 10 hours per day Assume capacity of dump truck is 6m³ and 15 tons
	Wind erosion Source ID: A85	Percentage active area Emission Factor	100 % (unmitigated) 20 % (mitigated) 0.85 Mg/hectare/year 2.69533E-06 g/m³/s (unmitigated) 5.39066E-07 g/m³/s (mitigated)	80% stockpiling area is covered by imprevious sheets AP42, Table 11.9-4
Barging Point	Unloading of spoils to barge Source ID: P3	Mitigation efficiency  Particle size multiplier Moisture content Average wind speed  Emission Factor Maximum daily output Maximum hourly output  Emission Rate	50 %  0.74 4.8 % 2.6 m/s  0.000431889 kg/Mg 1500 m <sup>3</sup> /day 150 m <sup>3</sup> /hr 375 Mg/hr 0.044988405 g/s (unmitigated) 0.022494203 g/s (mitigated)	3-side with top cover and water spraying system to be provided (From Control Techniques for Particulate Emissions from Stationary Sources Vol.2) spray at point of spoil dumping k (particle size < 30µm) AP42, Table 13.2.4-1 Annual mean wind speed recorded at Wong Chuk Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] Obtained from engineer 10 hours per day Assume capacity of dump truck is 6m³ and 15 tons

## N) Lee Nam Road Barging Point

	Chau Work Site (With	Conveyor Belt)		
Works Area	Sources		Parameter	Remarks
Spoil Disposal	Material handling	Percentage active stockpile area	91.7 %	water suppression 12 times a day
	and storage piles	Particle size multiplier	0.74	k (particle size < 30µm)
	Source ID: A87	Moisture content	4.8 %	AP42, Table 13.2.4-1
		Average wind speed	2.6 m/s	Annual mean wind speed recorded at Wong Chuk
				Hang in 2008
		Emission Factor	0.000431889 kg/Mg	E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4]
		Maximum daily output	1200 m <sup>3</sup> /day	Obtained from Section 4.5, Table 4.1, NEX/1039
		waximam dany output	1200 III /day	South Island Line (East) Preliminary Design Report
		Maximum hourly output	100 m <sup>3</sup> /hr	12 hours per day
			250 Mg/hr	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons
		Total Works Area	450 m <sup>2</sup>	
		Stockpile area	45 m <sup>2</sup>	
		Emission Rate	0.000666495 g/m <sup>2</sup> /s (unmitigated)	
			5.53191E-05 g/m <sup>2</sup> /s (mitigated)	
			one in a second of the second	
	Wind erosion	Percentage active area	100 % (unmitigated)	
	Source ID: A87		20 % (mitigated)	80% stockpiling area is covered by imprevious sheets
		Emission Factor	0.85 Mg/hectare/year	AP42, Table 11.9-4
			2.69533E-06 g/m²/s (unmitigated)	
			5.39066E-07 g/m <sup>2</sup> /s (mitigated)	
			, , ,	
LWS Ventilation	Heavy construction	Percentage active area	6 %	Assume 6% active area for heavy construction
Building	Source ID: A86	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	,
		No. of working hours per day	12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			1.43697E-05 g/m²/s (unmitigated)	
			1.19268E-06 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	6 %	
	Source ID: A86	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.2
			1.6172E-07 g/m <sup>2</sup> /s	
Slope Stabilization	Heavy construction	Percentage active area	6 %	Accume CO/ poting area for began accepturation
Works	Source ID: A72-A73	•		Assume 6% active area for heavy construction
WOIKS	Source ID. A72-A73	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month No. of working hours per day	26 days	
		Emission Factor	12 hours	AP42, Section 13.2.3.3
		Emission Factor	2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated)	AP42, Section 13.2.3.3
			1.19268E-06 g/m²/s (unimitigated)	
			1.19266E-06 g/III-/S (IIIIligaled)	
	Wind erosion	Percentage active area	6 %	
	Source ID: A72-A73	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.2
			1.6172E-07 g/m <sup>2</sup> /s	,
			3	
Barging Point	Unloading of spoils			3-side with top cover and water spraying system to be provided
	to barge	Mitigation efficiency	50 %	(From Control Techniques for Particulate Emissions from
	Source ID: P6			Stationary Sources Vol.2)
		Particle size multiplier	0.74	k (particle size < 30μm)
		Moisture content	4.8 %	AP42, Table 13.2.4-1
		Average wind speed	2.6 m/s	Annual mean wind speed recorded at Wong Chuk
		Emission Factor	0.000431889 kg/Mg	Hang in 2008 AP42, Section 13.2.4
			* *	Assume 240 truck trips per day
		Maximum daily output	1440 m³/day	(Spoils to barge transferred from road traffic)
		Maximum hourly output	120 m <sup>3</sup> /hr	12 hours per day
		1	300 Mg/hr	Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons
			-	Obtained from Section 4.5, Table 4.1, NEX/1039
		Maximum daily output	1200 m <sup>3</sup> /day	South Island Line (East) Preliminary Design Report
			,	(Spoils to barge transferred from conveyor belt)
		Maximum hourly output	100 m <sup>3</sup> /hr	12 hours per day
		Total maxmium hourly output	400 m <sup>3</sup> /hr	
		Emission Rate	0.047987632 g/s (unmitigated)	
			0.023993816 g/s (mitigated)	

### O) Chung Hom Kok Magazine Site

Works Area	Sources		Parameter	Remarks
Magazine Site	Heavy construction	Percentage active area	6 %	Assume 6% active area for heavy construction
_	Source ID: A88	Mitigation efficiency	91.7 %	Water suppression 12 times a day
		No. of working days per month	26 days	
		No. of working hours per day	12 hour	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			1.43697E-05 g/m²/s (unmitigated)	
			1.19268E-06 g/m <sup>2</sup> /s (mitigated)	
	Wind Erosion	Percentage active area	6 %	
	Source ID: A88	Emission Factor	0.85 Mg/hectare/year	AP42, Section 11.9.2
			1.6172E-07 g/m <sup>2</sup> /s	

### P) Concurrent Projects - Essential Public infrastructure Works (EPIW)

Descript:	Causes -	T .	Parameter	Damarka
Description Modification of	Sources Heavy construction	Percentage active area	Parameter 6 %	Remarks Assume 6% active area for heavy construction
Roads and U-turn Lanes at Wong	Source ID: A33, A35	Mitigation efficiency	91.7 %	Water suprression 12 times a day
Chuk Hang		No. of working days per month No. of working hours per day	26 days 12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	
	Wind erosion	Percentage active area	6 %	
	Source ID: A33, A35		0.85 Mg/hectare/year	AP42, Section 11.9.2
			1.6172E-07 g/m²/s	
Widening of Heung	Heavy construction	Percentage active area	6 %	Assume 6% active area for heavy construction
Yip Road and associated road	Source ID: A54-A55	Mitigation efficiency No. of working days per month	91.7 % 26 days	Water suprression 12 times a day
improvement works		No. of working hours per day	12 hour	
Public Transport		Emission Factor	2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated)	AP42, Section 13.2.3.3
Interchange (PTI) underneath Wong			1.19268E-06 g/m²/s (mitigated)	
Chuk Hang (WCH)	Wind erosion	Percentage active area	6 %	
Station	Source ID: A54-A55	Emission Factor	0.85 Mg/hectare/year 1.6172E-07 g/m²/s	AP42, Section 11.9.2
Footbridge connecting to Heung				
Yip Road and WCH				
Road				
Footbridge				
connecting to Ap Lei Chau Estate				
Footbridge (with	Heavy construction	Percentage active area	6 %	
Lift) over Ap Lei	Source ID: A84	Mitigation efficiency	91.7 %	Assume 6% active area for heavy construction Water suprression 12 times a day
Chau Bridge Road		No. of working days per month No. of working hours per day	26 days 12 hours	
		Emission Factor	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	
		_		
	Wind erosion Source ID: A84	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year	AP42, Section 11.9.2
			1.6172E-07 g/m²/s	
Wan Chai	Heavy construction	Emission Factor	3.74E-06 g/m²/s (mitigated)	Extract from EIA report of Wan Chai Development Phase II and
Development Phase and Central- Wan	Source ID: A12a, A12b			Central-Wan Chai Bypass (Appendix 3.1 p.7 Scenario 3, (HKCEC2E)), assume 6% active area
Chai Bypass	Wind erosion	Emission Factor	2.70E-06 g/m²/s	Extract from EIA report of Wan Chai Development Phase II and
	Source ID: A12a,	Emission Factor	2.70E-06 g/IIF/S	Central-Wan Chai Bypass (Appendix 3.1 p.8 Scenario 3,
	A12b Heavy construction	Emission Factor	3.74E-06 g/m²/s (mitigated)	(HKCEC2E)), assume 100% active area  Extract from EIA report of Wan Chai Development Phase II and
	Source ID: A13			Central-Wan Chai Bypass (Appendix 3.1 p.7 Scenario 3, (HKCEC2W)), assume 6% active area
	Wind erosion Source ID: A13	Emission Factor	2.70E-06 g/m²/s	Extract from EIA report of Wan Chai Development Phase II and Central-Wan Chai Bypass (Appendix 3.1 p.8 Scenario 3,
				(HKCEC2W)), assume 100% active area
HATS Stage 2A	Heavy construction Source ID: A85a	Emission Factor	1.25E-05 (Unmitigated)	Extract from EIA report of HATS Stage 2A
	(Cyberport drop shaft)	Emission Later	Tizoz do (dillinigatos)	Appendix 3.1, (source ID: CB-N-1), assume 6% active area
	Silait)			
	Wind erosion			5 / /
	Source ID: A85a (Cyberport drop	Emission Factor	2.70E-06 (Unmitigated)	Extract from EIA report of HATS Stage 2A Appendix 3.1, (source ID: CB-N-1), assume 100% active area
	shaft)			
Reprovisioning of Bus Terminal	Heavy construction Source ID: A57a	Percentage active area Mitigation efficiency	6 % 91.7 %	Assume 6% active area for heavy construction Water suprression 12 times a day
		No. of working days per month	26 days	
		No. of working hours per day Emission Factor	12 hour 2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
			1.43697E-05 g/m²/s (unmitigated) 1.19268E-06 g/m²/s (mitigated)	
	Wind erosion Source ID: A57a	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year	AP42, Section 11.9.2
			1.6172E-07 g/m²/s	
HK West Drainage	Heavy construction	Percentage active area	6 %	Assume 6% active area for heavy construction
Tunnel	Source ID: A89-93	Mitigation efficiency No. of working days per month	91.7 % 26 days	Water suprression 12 times a day
		No. of working hours per day Emission Factor	12 hour	AP42 Section 12.2.2.2
		Emission racion	2.69 Mg/hectare/month of activity 1.43697E-05 g/m²/s (unmitigated)	AP42, Section 13.2.3.3
			1.19268E-06 g/m²/s (mitigated)	
	Wind erosion Source ID: A89-93	Percentage active area Emission Factor	6 % 0.85 Mg/hectare/year	AP42, Section 11.9.2
	Source ID. A89-93	Emission racion	0.85 Mg/nectare/year 1.6172E-07 g/m²/s	72, JOURON 11.3.2
	Unloading of spoils			Assume 3-side with top cover and water spraying system to be
	to barge	Mitigation efficiency	50 %	provided (From Control Techniques for Particulate Emissions from
	Source ID: P7			Stationary Sources Vol.2) spray at point of spoil dumping
		Particle size multiplier Moisture content	0.74 4.8 %	k (particle size < 30µm) AP42, Table 13.2.4-1
		Average wind speed	4.8 % 2.6 m/s	Annual mean wind speed recorded at Wong Chuk
		Emission Factor	0.000431889 kg/Mg	Hang in 2008 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4]
		Maximum daily output	1500 m <sup>3</sup> /day	Obtained from engineer
		Maximum hourly output	150 m <sup>3</sup> /hr 375 Mg/hr	10 hours per day Assume capacity of dump truck is 6m <sup>3</sup> and 15 tons
		Emission Rate	0.044988405 g/s (unmitigated)	and to total
			0.022494203 g/s (mitigated)	