Details of Dust Emission Sources for Annual RSP

Work Area	Sources		Parameter	Remarks
Kong Nga Po	Heavy construction	Percentage active area, p	13.6 %	Assume % works area for heavy construction
	Source ID:	Mitigation efficiency	91.7 %	Water spraying 8 times a day (once every 1.25 hours)
	1 - 22, 24 - 52	No. of working days per month, d	26 days	
		No. of working hours per day, h	10 hour	Mon to Sat, 8:00 to 18:00
		Emission Factor for TSP	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
		% content of RSP	30 % of TSP	
		Emission Factor for RSP	0.81 Mg/hectare/year	
		Emission Rate for RSP	1.17636E-05 g/m ² /s (unmitigated)	=2.69*0.3*1000000/(10000*d*h*60*60)*p/100
			9.76376E-07 g/m²/s (mitigated)	
	Wind Erosion for	Percentage active area, p	13.6 %	
	Working Hours	Mitigation efficiency	91.7 %	Water spraying 8 times a day (once every 1.25 hours)
	Source ID:	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Same as above	% content of RSP	30 % of TSP	
		Emission Factor for RSP	0.26 Mg/hectare/year	
		Emission Rate for RSP	1.10325E-07 g/m ² /s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100
			9.157E-09 g/m²/s (mitigated)	
	Wind Erosion for	Percentage active area, p	100 %	
	Non-Working Hours	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Source ID:	% content of RSP	30 % of TSP	
	Same as above	Emission Factor for RSP	0.26 Mg/hectare/year	
		Emission Rate for RSP	8.086E-07 g/m ² /s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100

Work Area	Sources		Parameter	Remarks
Kong Nga Po	Heavy construction	Percentage active area, p	13 %	Assume % works area for heavy construction
Roadworks - at	Source ID:	Mitigation efficiency	91.7 %	Water spraying 8 times a day (once every 1.25 hours)
grade	R24 - R40	No. of working days per month, d	26 days	
		No. of working hours per day, h	10 hour	Mon to Sat, 8:00 to 18:00
		Emission Factor for TSP	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
		% content of RSP	30 % of TSP	
		Emission Factor for RSP	0.81 Mg/hectare/year	
				Assume road width equals 12m, therefore multiply emission rate
		Emission Rate for RSP	1.33909E-04 g/m/s (unmitigated)	by 12m.
				'=2.69*0.3*1000000/(10000*d*h*60*60)*p/100 * 12
			1.11144E-05 g/m/s (mitigated)	
	Wind Erosion for	Percentage active area, p	13 %	
	Working Hours	Mitigation efficiency	91.7 %	Water spraying 8 times a day (once every 1.25 hours)
	Source ID:	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Same as above	% content of RSP	30 % of TSP	
		Emission Factor for RSP	0.26 Mg/hectare/year	
		Emission Rate for RSP	1.25587E-06 g/m/s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100 *12
			1.04237E-07 g/m/s (mitigated)	
	Wind Erosion for	Percentage active area, p	100 %	
	Non-Working Hours	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Source ID:	% content of RSP	30 % of TSP	
	Same as above	Emission Factor for RSP	0.26 Mg/hectare/year	
		Emission Rate for RSP	9.7032E-06 g/m/s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100 *12

Details of Dust Emission Sources for Daily and Annual RSP Assessment

torage piles	Percentage open stockpile area, p	20	0/	
			%	80% stockpiling area is covered by impervious sheets and all
				dusty material should be sprayed with water immediately prior to
ource ID:				any loading or transfer operation so as to keep the dusty material
3				wet.
	Particle size multiplier, k	0.35		k (particle size < 10μm)
	Moisture content, M	14	%	From engineer
	Average wind speed, U	2.9	m/s	from PATH mm5 data grids (25,43), (25,44), (25,45) and (26,44),
				maximum annual average wind speed for 2010
	Emission Factor, E	5.2604E-05	kg/Mg	E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4]
	Monthly output	20,000	m3/month	From engineer
	Maximum hourly output, op	76.9	m3/hr	26 days per month, 10 working hours per day
		153.8	Mg/hr	Assumed capacity of dump truck is 15,000kg/2,000kg/m ³ =7.5m ³
				and 15 tons
	Area of stockpile, A	7,569	m ²	
	Emission Rate	2.97005E-07	g/m²/s (unmitigated)	Unmitigated Emission Rate=E*1000*op/(A*60*60)
		5.94011E-08	g/m²/s (mitigated)	Mitigated Emission Rate'=E*1000*op/(A*60*60)*p/100
lind erosion	Percentage open stocknile area n	100	% (upmitigated)	
	r ercentage open stockpile alea, p			80% stockpiling area is covered by impervious sheets
	Emission Factor			AP42, Section 11.9.4
				=0.85*1000000/(10000*365*24*60*60)*p/100
			,	
3 7 c	ind erosion burce ID:	Particle size multiplier, k Moisture content, M Average wind speed, U Emission Factor, E Monthly output Maximum hourly output, op Area of stockpile, A Emission Rate ind erosion Percentage open stockpile area, p	Particle size multiplier, k0.35Moisture content, M14Average wind speed, U2.9Emission Factor, E5.2604E-05Monthly output20,000Maximum hourly output, op76.9153.8Area of stockpile, AEmission Rate2.97005E-075.94011E-082.97005E-07ource ID:20aboveEmission FactorEmission Rate2.69533E-06	Area of stockpile, A Emission Rate7,569 2.97005E-07 5.94011E-08m² % m/sInd erosion purce ID: a abovePercentage open stockpile area, p Emission Factor0.035 14

Work Area	Sources		Parameter	Remarks
		Percentage active area, p	13 %	Assume % works area for heavy construction (same as for along
,		Mitigation efficiency	91.7 %	Kong Nga Po Road) Assume water spraying 8 times a day (once every 1.25 hours)
	C11	No. of working days per month, d No. of working hours per day, h	26 days 10 hour	Assume Mon to Sat, 8:00 to 18:00
Related Facilities at		Emission Factor for TSP	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
Sandy Ridge		% content of RSP Emission Factor for RSP	30 % of TSP 0.81 Mg/hectare/year	
Area Sources		Emission Rate for RSP	1.11591E-05 g/m²/s (unmitigated) 9.26201E-07 g/m²/s (mitigated)	=2.69*0.3*1000000/(10000*d*h*60*60)*p/100
		Percentage active area, p	13 % 91.7 %	
	Working Hours Source ID:	Mitigation efficiency Emission Factor for TSP	0.85 Mg/hectare/year	Assume water spraying 8 times a day (once every 1.25 hours) AP42, Table 11.9-4
	Same as above	% content of RSP Emission Factor for RSP	30 % of TSP 0.26 Mg/hectare/year	
		Emission Rate for RSP	1.04656E-07 g/m²/s (unmitigated) 8.68643E-09 g/m²/s (mitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100
		Percentage active area, p Emission Factor for TSP	100 % 0.85 Mg/hectare/year	AP42, Table 11.9-4
	Source ID:	% content of RSP	30 % of TSP	
	Same as above	Emission Factor for RSP Emission Rate for RSP	0.26 Mg/hectare/year 8.086E-07 g/m²/s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100
		Percentage active area, p	13 %	Assume % works area for heavy construction (same as for along
Concurrent Project:	Source ID:	Mitigation efficiency	91.7 %	Kong Nga Po Road) Assume water spraying 8 times a day (once every 1.25 hours)
	C1, C2, C4, C5, C9,	No. of working days per month, d	26 days	Assume water spraying 8 times a day (once every 1.25 hours)
Crematorium and Related Facilities at		No. of working hours per day, h Emission Factor for TSP	10 hour 2.69 Mg/hectare/month of activity	Assume Mon to Sat, 8:00 to 18:00 AP42, Section 13.2.3.3
Sandy Ridge		% content of RSP	30 % of TSP	
Line Sources		Emission Factor for RSP	0.81 Mg/hectare/year	Assume road width equals 30m, therefore multiply emission rate
		Emission Rate (C1, C2)	3.34772E-04 g/m/s (unmitigated)	by 30m =2.69*0.3*1000000/(10000*d*h*60*60)*p/100 *30
			2.7786E-05 g/m/s (mitigated)	
		Emission Rate (C4, C5, C9)	2.23181E-04 g/m/s (unmitigated)	Assume road width equals 20m, therefore multiply emission rate by 20m
			1.8524E-05 g/m/s (mitigated)	=2.69*0.3*1000000/(10000*d*h*60*60)*p/100 *20
		Emission Data (C12, C12, C14)		Assume road width equals 15m, therefore multiply emission rate
		Emission Rate (C12, C13, C14)	1.67386E-04 g/m/s (unmitigated)	by 15m =2.69*0.3*1000000/(10000*d*h*60*60)*p/100 *15
			1.3893E-05 g/m/s (mitigated)	
		Percentage active area, p Mitigation efficiency	13 % 91.7 %	Assume water spraying 8 times a day (once every 1.25 hours)
	Source ID:	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Same as above	% content of RSP Emission Factor for RSP	30 % of TSP 0.26 Mg/hectare/year	
		Emission Rate (C1, C2)	3.13967E-06 g/m/s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100 *30
		Emission Rate (C4, C5, C9)	2.60593E-07 g/m/s (mitigated) 2.09312E-06 g/m/s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100 *20
			1.73729E-07 g/m/s (mitigated)	
		Emission Rate (C12, C13, C14)	1.56984E-06 g/m/s (unmitigated) 1.30296E-07 g/m/s (mitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100 *15
		Percentage active area, p Emission Factor for TSP	100 % 0.85 Mg/hectare/year	AP42, Table 11.9-4
	Source ID:	% content of RSP	30 % of TSP	
	Same as above	Emission Factor for RSP Emission Rate (C1, C2)	0.26 Mg/hectare/year 2.42580E-05 g/m/s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100 *30
		Emission Rate (C4, C5, C9)	1.61720E-05 g/m/s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100 *20
		Emission Rate (C12, C13, C14)	1.21290E-05 g/m/s (unmitigated)	=0.85*0.3*1000000/(10000*365*24*60*60)*p/100 *15
Kong Nga Po		Percentage active area, p	100.00 %	Assume % works area for heavy construction (From EIA)
Concurrent Project:		Mitigation efficiency	87.5 %	Water suppression 8 times a day From EIA
0		No. of working days per month, d No. of working hours per day, h	26 days 12 hour	From EIA, assume Mon to Sat, 8:00 to 20:00
Treatment Facilities (Phase 2)		Emission Factor for TSP % content of RSP	2.69 Mg/hectare/month of activity 30 % of TSP	AP42, Section 13.2.3.3
(1 HOU 2)		Emission Factor for RSP	0.81 Mg/hectare/year	
		Emission Rate for RSP	7.18483E-05 g/m²/s (unmitigated) 8.98104E-06 g/m²/s (mitigated)	=2.69*0.3*1000000/(10000*d*h*60*60)*p/100
1	Wind Erosion	Percentage active area, p	100.00 %	
	Source ID: Same as above	Emission Easter for TSD	0.85 Malbootarolyaar	AP42 Table 11.0.4
	Same as above	Emission Factor for TSP % content of RSP	0.85 Mg/hectare/year 30 % of TSP	AP42, Table 11.9-4
	Same as above			AP42, Table 11.9-4 =0.85*0.3*1000000/(10000*365*24*60*60)*p/100

Details of Dust Emission Sources for Daily and Annual RSP Assessment

Description	Sources	Parameter	E	mission Rate	Remarks
Kong Nga Po	Material handling and				From EIA:
Concurrent Project:	storage piles				80% stockpiling area is covered by impervious sheets and all
	Source ID: S1 & S8	Percentage open stockpile area, p	20	%	dusty material should be sprayed with water immediately prior to
Organic Waste					any loading or transfer operation so as to keep the dusty material
Treatment Facilities					wet.
(Phase 2)		Particle size multiplier, k	0.35		k (particle size < 10µm)
		Moisture content, M	5	%	Asuume made by engineer, worst case scenario
C&D Stockpile Area		Average wind speed, U	2.5	m/s	Annual mean wind speed from mm5 year 2010 (date 2 Jan to 30 Dec)
		Emission Factor, E	0.000183335	kg/Mg	E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From engineer
		Maximum daily average output	106.8	m³/day	Total volume of output: 25,000 m ³ Anticipated dusty construction activities duration: 9 months (assume 26 working days per month)
		Maximum hourly average output, op	8.9	m³/hr	12 hours per day
		Area of the stockpile, A Emission Rate	4012.08 2.82524E-07	Mg/hr m ² g/m²/s (unmitigated) g/m²/s (mitigated)	Assume capacity of dump truck is 6m ³ and 15 tons Assumption made by consultant Unmitigated Emission Rate=E*1000*op/(A*60*60) Mitigated Emission Rate'=E*1000*op/(A*60*60)*p/100
	Wind erosion	Percentage open stockpile area, p	100	% (unmitigated)	
				% (mitigated)	80% stockpiling area is covered by impervious sheets
	As above	Emission Factor	0.85	Mg/hectare/year	AP42, Table 11.9.4
		Emission Rate	2.69533E-06	g/m²/s (unmitigated)	=0.85*1000000/(10000*365*24*60*60)*p/100
			5.39066E-07	g/m²/s (mitigated)	

Details of Dust Emission Sources for Annual FSP

Work Area	Sources		Parameter	Remarks
Kong Nga Po	Heavy construction	Percentage active area, p	13.6 %	Assume % works area for heavy construction
	Source ID:	Mitigation efficiency	91.7 %	Water spraying 8 times a day (once every 1.25 hours)
	1 - 22, 24 - 52	No. of working days per month, d	26 days	
		No. of working hours per day, h	10 hour	Mon to Sat, 8:00 to 18:00
		Emission Factor for TSP	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
		% content of FSP	3 % of TSP	
		Emission Factor for FSP	0.08 Mg/hectare/year	
		Emission Rate for FSP	1.17636E-06 g/m ² /s (unmitigated)	=2.69*0.03*1000000/(10000*d*h*60*60)*p/100
			9.76376E-08 g/m²/s (mitigated)	
	Wind Erosion for	Percentage active area, p	13.6 %	
	Working Hours	Mitigation efficiency	91.7 %	Water spraying 8 times a day (once every 1.25 hours)
	Source ID:	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Same as above	% content of FSP	3 % of TSP	
		Emission Factor for FSP	0.03 Mg/hectare/year	
		Emission Rate for FSP	1.10325E-08 g/m ² /s (unmitigated)	=0.85*0.03*1000000/(10000*365*24*60*60)*p/100
			9.157E-10 g/m²/s (mitigated)	
	Wind Erosion for	Percentage active area, p	100 %	
	Non-Working Hours	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Source ID:	% content of FSP	3 % of TSP	
	Same as above	Emission Factor for FSP	0.03 Mg/hectare/year	
		Emission Rate for FSP	8.086E-08 g/m ² /s (unmitigated)	=0.85*0.03*1000000/(10000*365*24*60*60)*p/100

Work Area	Sources		Parameter	Remarks
Kong Nga Po	Heavy construction	Percentage active area, p	13 %	Assume % works area for heavy construction
Roadworks - at	Source ID:	Mitigation efficiency	91.7 %	Water spraying 8 times a day (once every 1.25 hours)
grade	R24 - R40	No. of working days per month, d	26 days	
		No. of working hours per day, h	10 hour	Mon to Sat, 8:00 to 18:00
		Emission Factor for TSP	2.69 Mg/hectare/month of activity	AP42, Section 13.2.3.3
		% content of FSP	3 % of TSP	
		Emission Factor for FSP	0.08 Mg/hectare/year	
				Assume road width equals 12m, therefore multiply emission rate
		Emission Rate for FSP	1.33909E-05 g/m/s (unmitigated)	by 12m.
				'=2.69*0.03*1000000/(10000*d*h*60*60)*p/100 * 12
			1.11144E-06 g/m/s (mitigated)	
	Wind Erosion for	Percentage active area, p	13 %	
	Working Hours	Mitigation efficiency	91.7 %	Water spraying 8 times a day (once every 1.25 hours)
	Source ID:	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Same as above	% content of FSP	3 % of TSP	
		Emission Factor for FSP	0.03 Mg/hectare/year	
		Emission Rate for FSP	1.25587E-07 g/m/s (unmitigated)	=0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *12
			1.04237E-08 g/m/s (mitigated)	
	Wind Erosion for	Percentage active area, p	100 %	
	Non-Working Hours	Emission Factor for TSP	0.85 Mg/hectare/year	AP42, Table 11.9-4
	Source ID:	% content of FSP	3 % of TSP	
	Same as above	Emission Factor for FSP	0.03 Mg/hectare/year	
		Emission Rate for FSP	9.7032E-07 g/m/s (unmitigated)	=0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *12

Details of Dust Emission Sources for Daily and Annual FSP Assessment

Description	Sources	Parameter	Er	nission Rate	Remarks
C&D Stockpile Area	Material handling and storage piles Source ID: 23	Percentage open stockpile area, p	20	%	80% stockpiling area is covered by impervious sheets and all dusty material should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.
		Particle size multiplier, k Moisture content, M Average wind speed, U Emission Factor, E Monthly output Maximum hourly output, op Area of stockpile, A Emission Rate	7.96575E-06 20,000 76.9 153.8 7,569 4.49751E-08	% m/s kg/Mg m3/month m3/hr Mg/hr	k (particle size < 2.5µm) From engineer from PATH mm5 data grids (25,43), (25,44), (25,45) and (26,44), maximum annual average wind speed for 2010 E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From engineer 26 days per month, 10 working hours per day Assumed capacity of dump truck is 15,000kg/2,000kg/m ³ =7.5m ³ and 15 tons Unmitigated Emission Rate=E*1000*op/(A*60*60) Mitigated Emission Rate'=E*1000*op/(A*60*60)*p/100
	Wind erosion Source ID: As above	Percentage open stockpile area, p Emission Factor Emission Rate	20 0.85 2.69533E-06	% (unmitigated) % (mitigated) Mg/hectare/year g/m²/s (unmitigated) g/m²/s (mitigated)	80% stockpiling area is covered by impervious sheets AP42, Section 11.9.4 =0.85*1000000/(10000*365*24*60*60)*p/100

Korg Ryap P Heavy controllation Percentage active and a product and came a work and a first work and a	Work Area	Sources		Parameter	Remarks
Substantial Particul Fulficier Reich Rufe Ness Bourses 50, 50, 70, 50, -00, 11, 50, 40, 40, 50, 50, 50, 50, 50, 50, 50, 50, 50, 5	Kong Nga Po	Heavy construction	Percentage active area, p	13 %	Assume % works area for heavy construction (same as for along
Constrained Bandy Fuelge Marky Nage Marky N			Mitigation efficiency	91.7 %	Kong Nga Po Road) Assume water spraying 8 times a day (once every 1.25 hours)
Network Public At Service Tables and the service of the se				5	Assume Man to Sat 9:00 to 19:00
Area Sources Image: hereace here the Parkson Free Parkso					
Avera Source Emission Rate for RSP 111951 C0 g/m/s consignated) s 2.2601 C0 g/m/s (consignated) s 2.2	Sandy Ridge				
Korp Ng P0 Assure to the Safe Application of S	Area Sources			•	=2.69*0.03*1000000/(10000*d*h*60*60)*p/100
Walking Human Milligation efficiency Inscience 1200 0.1.7 % (Construct 1200 Assume anter symptific thirds and by (once every 1.2 (Construct 1200 Weaking Human Milligation efficiency (Construct 1200 0.1.7 % (Construct 1200 0.2.8 fully/index/even (Construct 1200<					
Source ID: Same a Booke Same a Same A Same A Same Same A Same A Same Same Same Same A Same Same Same Same Same Same Same Sa					
Same as allower % control of FSP 0.3 % of TSP 0.3 % of TSP 0.4 8492.4 (b) mm (minipation) -0.8 910.0211000000(100007667241001007507100.000766724100100750724100100011000011000750724100100001100000000000000000000000000		-			
Non-Finishing Register Presidence Rate for PSP 1.0.48687.6.9 gm/s (unsinglated) 0.66644.7.0 gm/s (unsinglated) 0.66644.7.0 gm/s (unsinglated) -0.6570.031000000(10002136124100100/1000 361124 Kong Nga PB Orgensition Factor of SP Source ID Contactume Poped Register Rate for FSP Contactor PSP Contactor PSP Contacto			% content of FSP	3 % of TSP	
Image: second				e <i>j</i>	=0.85*0.03*1000000//10000*365*2/1*60*60)*p/100
New-Working Hours Source LD: Source at Discource LD: Source Address and the set of FSP Emission Factor for TSP Source D: Source D: Source D: Same as above Emission Factor for TSP Source D: Same as above Emission Factor for					
Source IIC: Same as above % contant of FSP Emission Factor for FSP Emission Factor for FSP 3, % of TSP 0.03 ByBectare/year eo.800.0410000000(10000*569:24*00*00)*p100 Kong Nga Po Concorner (Frigota Source IIC: C1 C2, C4, C5, C9, C12, C13, C14 Percentage adve area, p 13 % Assume Your and the concorner of the concorner (Frigota) Assume Your Analysis and the concorner of the concorner (Frigota) Assume Your Analysis and the concorner of the concorner (Frigota) Assume Your Analysis and Your Analysis (C12, C13, C14 Percentage adve area, p 13 % Assume Your Analysis and Your Analysis (C12, C13, C14 Percentage adve area, p 13 % Assume Your Analysis (C12, C13, C14 Percentage adve area, p 13 % Assume Your Analysis (C12, C13, C14 Percentage adve area, p 13 % Assume Your Analysis (C12, C13, C14 Assume Your Analysis (C12, C13, C14 Percentage adve area, p 13 % Assume Your Analysis (C12, C13, C14 Assume Your Anal					
Same as above Emission Factor for FSP 0.03 Mghectareyear 8.068E48 girls (umrigated) -0.5510.051000000(100007367244007607p100 Kong Nga PG Concretent Impiect Source D: Concretent Impiect Pationting a cline area, p Misgritum effectory Concretent Impiect Assume Xee works area for heavy construction (same a Nog Age to Noad) Contraction Impiectory Restore Facilities of Samp Rodge C1. C2, C4. C5, C6 C12. C13, C14 Misgritum efficiency No. of working data per month, d No. of working adaps per		•		•	AP42, Table 11.9-4
King Nga Po Construction (manufacture) Heavy construction (manufacture) Partontlage active area, p Migation efficiency No. d working frouip per day, h Source 10: (12, 013, 014) Partontlage active area, p Migation efficiency No. d working frouip per day, h Source 10: (12, 013, 014) Assume K works area for heavy construction (name an Kong Nga Po Construction) Columnative Related Faultieux Stores Dourse 11, 20, 20, 40, 50, 20, (12, 013, 014) Partontlage active area, p Migation efficiency Entrasion Factor for FSP Entrasion Rate (C1, C2) 13, % Migation efficiency 20, 20, 20, 20, 20, 20, 20, 20, 20, 20,			Emission Factor for FSP	0.03 Mg/hectare/year	
Concurrent Project. Source ID. Mitigation efficiency Construint and Cartactination of Carta Carta Carta Sandy Ridge Emission Factor for TSP Readed Facilities at Sandy Ridge Emission Factor for TSP Emission Factor for TSP Source ID Same as above 10 Factor for TSP Emission Factor for TSP Emiss			Emission Rate for FSP	8.086E-08 g/m²/s (unmitigated)	=0.85*0.03*1000000/(10000*365*24*60*60)*p/100
Conducting Horizett Secure ID. Secure ID. <t< td=""><td>Kong Nga Po</td><td>Heavy construction</td><td>Percentage active area, p</td><td>13 %</td><td>Assume % works area for heavy construction (same as for along</td></t<>	Kong Nga Po	Heavy construction	Percentage active area, p	13 %	Assume % works area for heavy construction (same as for along
Columbarum Control Care Columbarum Related Facilities a Source Sources Line Sources Wind Erosian frame Facilities a Source Source Sour		•			Kong Nga Po Road)
Crementorium and Related Traditions Sandy Ridgs Line Sources Related Traditions Sandy Ridgs Line Sources Related Traditions Related Traditions	Columbarium	C1, C2, C4, C5, C9,			Assume water spraying 8 times a day (once every 1.25 hours)
Sandy Ridge Line Sources In account of ESD 2.3 % of TSD 0.08 Mg/hectare/year Assume road with equals 30m, therefore multiply em Line Sources Emission Rate (C1, C2) 2.4 % of the source of t	Crematorium and			-	Assume Mon to Sat, 8:00 to 18:00
Une Sources Emission Rate (C1, C2) 0.08 Mghedrare/year Assume mad width equals 30m, therefore multiply emission Rate (C1, C2) 1.11 Performed active area Emission Rate (C1, C2) 3.34772E-05 g/ms (umitigated) 2.27786F-06 g/ms (mitigated) Assume mad width equals 30m, therefore multiply emission Rate (C1, C2, C5, C9) 2.23161E-05 g/ms (umitigated) 2.23161E-05 g/ms (umitigated) Assume road width equals 20m, therefore multiply emission Rate (C1, C1, C1, C14) 1.8728E-06 g/ms (unitigated) Assume road width equals 15m, therefore multiply emission Rate (C12, C13, C14) Vind Erosion for Source 10. Same as above Percentage active area, p 1.3999E-06 g/ms (mitigated) 2.2010.0311000000(100000 dth 100 r06)*p1100 120 Same as above Percentage active area, p 1.3999E-06 g/ms (umitigated) 2.0000.0311000000(10000 dth 100 r06)*p1100 120 Same as above Some als above Percentage active area, p 1.3999E-06 g/ms (umitigated) 0.8570.0311000000(10000 dth 100 r07)86524760*00/p1100 120 Vind Erosion for Non-Working Hours Some als above Percentage active area, p 1.3997E-07 g/ms (umitigated) -0.8570.0311000000(10000736524760*00/p100 120 Source 10. Same as above Percentage active area, p 3.3977E-07 g/ms (umitigated) -0.8570.0311000000(10000736524*60*00/p100 120					AP42, Section 13.2.3.3
Line Sources Assume road with equals 30m, therefore multiply em by 30m. Augume road with equals 30m, therefore multiply em by 30m. Assume road with equals 30m, therefore multiply em by 30m. Augume road with equals 30m, therefore multiply em by 30m. 2.7786E-06 g/m/s (mitigated) Assume road with equals 20m, therefore multiply em by 30m. Augume road with equals 20m, therefore multiply em by 30m. 2.23181E-05 g/m/s (mitigated) Assume road with equals 20m, therefore multiply em by 30m. Wind Erosion for Source 1D: Same as above Percentage active area, p Emission Factor for TSP % content of FSP 13 % 3.54772E-05 g/m/s (umitigated) Assume water spraying 8 times a day (once every 1.2 Ab92C-70 g/m/s (umitigated) Wind Erosion for Working Hours Source 1D: Same as above Percentage active area, p Emission Factor for FSP % content of FSP 13 % 3.54772E-05 g/m/s (mitigated) Assume water spraying 8 times a day (once every 1.2 Ab92C-70 g/m/s (mitigated) Wind Erosion for Non-Working Hours Source 1D: Same as above Percentage active area, p mission Rate (C1, C2), C13, C14) 13 % 40.52002F-00 g/m/s (mitigated) =0.85'0 03'1000000(10000'365'24'60'06)/p'100 '12 =0.85'0 0					
Kong Nga Po Consumma Nation Percentage active area, p Non-Working Hours Source ID: Same as above Percentage active area, p Mind Ension for Working Hours Source 1D: Same as above Percentage active area, p Heavy construction Source ID: Same as above 135 Percentage active area, p Heavy construction Source ID: Same as above Percentage active area, p Heavy construction Source ID: Same as above 135 Percentage active area, p Heavy construction Source ID: Same as above Percentage active area, p Heavy construction Source ID: Same as above 135 Percentage active area, p Heavy construction Source ID: Same as above Percentage active area, p Heavy construction Source ID: Same as above 135 Percentage active area, p Heavy construction Source ID: Same as above Assume water spraying 8 times a day (once every 1.2 Percentage active area, p Hission Rate (C1, C2) Assume water spraying 8 times a day (once every 1.2 Percentage active area, p Hission Rate (C1, C2) Assume water spraying 8 times a day (once every 1.2 Percentage active area, p Hission Rate (C1, C3, C4) Assume water spraying 8 times a day (once every 1.2 Percentage active area, p Hission Rate (C1, C3, C4) Percentage active area, p Hission Rate (C1, C3, C4) Assume water spraying 8 times a day (once every 1.2 Percentage active area, p Hission Rate (C1, C3, C4) Percentage active area, p Hission Rate (C1, C3, C4) Pe	Line Sources				Assume road width equals 30m, therefore multiply emission rate
Kong Nga Po Concurrent Project: Name as above Percentage active area, p Wind Erosion factor for TSP % content of FSP Emission Rate (C1, C2, C13, C14) 1.8524E-06 g/m/s (umitigated) Assume road widh equals 20m, therefore multiply em by 20m; 2.2991.0311000000/(100007/dh/90/80/27)/100 120 Wind Erosion for Working Hours Surce ID: Same as above Percentage active area, p Mitigation efficiency Emission Factor for TSP % content of FSP 1.87386E-06 g/m/s (umitigated) Assume road widh equals 15m, therefore multiply em by 15m; 2.8991.0311000000/(100007/dh/90/80/27/160/97/100 173) Wind Erosion for Working Hours Same as above Percentage active area, p Mitigation efficiency Emission Factor for TSP % content of FSP Emission Factor for TSP 0.35 Mg/hectare/year 3.13807E-07 g/m/s (umitigated) Assume water spraying 8 times a day (once every 1.2 Assume value of active area, p Emission Factor for TSP 0.36 Mg/hectare/year 3.13807E-07 g/m/s (umitigated) =0.850.03*1000000/(100007/365*24*60*60)*p/100 174 Wind Erosion for Non-Working Hours Same as above Percentage active area, p Emission Factor for TSP 0.03 Mg/hectare/year 3.3007E-07 g/m/s (umitigated) =0.850.03*1000000/(100007/365*24*60*60)*p/100 174 Kong Nga Po Concurrent Project: (Phase 2) Percentage active area, p Wind Erosion Factor for TSP % content of FSP 100.00 % % of TSP Assume % works area for heavy construction (From E Emission Factor for TSP % content of FSP Corpanic Waste (Phase 2) Heavy construction % content of FSP 100.00 % % of TSP Assume %					
Kong Nga Po Concurrent Project: Same as above Percentage active area, p Midgator efficiency w. content of FSP Same as above 1.8524E-06 g/m/s (mitigated) 1.87386E-05 g/m/s (unmitigated) 1.8933E-06 g/m/s (mitigated) Assume value spraying 8 times a day (once every 1.2 Assume water spraying 8 times a day (once every 1.2 Assume % outs at the spraying 1.1 assume 1.9 d = 0.85°0.03°1000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°1000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°1000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°1000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°10000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°10000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°10000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°10000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°10000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°10000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°10000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03°10000000/(10000°365°24°60°60)*pr100~20 = 0.85°0.03					Assume road width equals 20m, therefore multiply emission rate
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Wind Erosion for Working Hours Source ID: Same as above Percentage active area, p Emission Factor for TSP Emission Factor for TSP Source ID: Same as above 1.87386E-05 g/m/s (untiligated) b) 15m: =2.69*0.03*1000000(10000*d*h*60*60)*p/100 *15 Wind Erosion for Working Hours Source ID: Same as above Percentage active area, p Emission Factor for TSP Emission Rate (C1, C2) 13 % 917.7 % Assume water spraying 8 times a day (once every 1.2 AP42, Table 11.9-4 Wind Erosion for Non-Working Hours Source ID: Same as above Percentage active area, p Emission Rate (C1, C2) 0.35 Mg/hectare/year 3.13867E-07 g/ms (untiligated) assume water spraying 8 times a day (once every 1.2 AP42, Table 11.9-4 Wind Erosion for Non-Working Hours Source ID: Source				1.8524E-06 g/m/s (mitigated)	
Wind Erosion for Working Hours Source ID: Same as above Percentage active area, p Mitigation efficiency Emission Factor for TSP Source ID: Same as above Percentage active area, p Mitigation efficiency Emission Factor for TSP Source ID: Same as above 13893E-06 g/m/s (mitigated) 91.7 % Source ID: Same as above Assume water spraying 8 times a day (once every 1.2 AP42, Table 11.9-4 Wind Erosion for Working Hours Source ID: Same as above Percentage active area, p Mitigation efficiency Emission Rate (C1, C2) Emission Rate (C1, C2, C13, C14) 0.03 Mg/hectare/year 3.1397E-07 g/m/s (unnitigated) 1.30296E-08 g/m/s (mitigated) 1.30296E-08 g/m/s (mitigated) 1.30296E-08 g/m/s (unnitigated) 1.30296E-08 g/m/s (unnitigated) 1.3122E-06 g/m/s (unnitigated) 1.3122			Emission Rate (C12, C13, C14)	1.67386E-05 g/m/s (unmitigated)	
Wind Erosion for Working Hours Source 1D: Same as above Percentage active area, p Miligation efficiency Emission Factor for TSP working Hours Same as above 13 % Miligation efficiency Emission Factor for TSP % content of FSP Emission Rate (C1, C2) 34 % 0.65 Mg/hectare/year 3.13967-Ev grms (unnitigated) AP42, Table 11.9-4 Wind Erosin for Non-Working Hours Source 1D: Same as above Percentage active area, p 0.03 Mg/hectare/year 3.13967-Ev grms (unnitigated) -0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *14 1.33296E-08 grms (unnitigated) Wind Erosin for Non-Working Hours Source 1D: Same as above Percentage active area, p 100 % % content of FSP % content of FSP % content of FSP 0.05 Mg/hectare/year 3.3 w of TSP -0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *14 1.33296E-08 grms (unnitigated) Kong Nga Po Concurrent Project: Concurrent Project: (Phase 2) Heavy construction Miligation efficiency No. dworking days per month, d Secure 1D: Sure BD Percentage active area, p Miligation efficiency No. dworking days per month, d Secure 1D: No. dworking days per month, d Secure 1D: Sure BD Percentage active area, p No. dworking days per month, d Secure 1D: No. dworking days per month, d Secure 1D: Same as above Percentage active area, p No. dworking days per month, d Secure 1D: Same as above Percentage active area, p No. dworking days per month, d Secure 1D: Same as above Assume % works area for heavy construction (From EL Secure 1D: Same as above Percentage active area, p No. dworking days per month, d Secure 1D: Same as above Percentage active area, p Miligation efficiency No. dwor				1 3803E 06 a/m/s (mitigated)	=2.69*0.03*1000000/(10000*d*h*60*60)*p/100 *15
Working Hours Source ID: Same as above Mitigation efficiency Emission Factor for TSP Same as above 91.7 % Emission Factor for TSP 3 % of TSP 0.03 Mg/hectare/year Assume water spraying 8 times a day (once every 1.2 AP42, Table 11.9-4 Very Part of the status					
Same as above% content of FSP Emission Rate (C1, C2) Emission Rate (C1, C2) Emission Rate (C1, C2)3 % of TSP (mitigated) 2.60392-08 ginks (imitigated) 2.60392-08 ginks (imitigated) 1.32026-08 ginks (imitigated) 1.32026-08 ginks (imitigated) 1.32026-08 ginks (imitigated) 1.32026-08 ginks (imitigated)=0.85°0.03°1000000/(10000°365°24°60°60)°p/100 °36 =0.85°0.03°1000000/(10000°365°24°60°60)°p/100 °36 =0.85°0.03°1000000/(10000°365°24°60°60)°p/1			•		Assume water spraying 8 times a day (once every 1.25 hours)
Kong Nga Po Concurrent Project: (Phase 2)Heavy construction Emission Rate for FSP Emission Rate for FSP <td></td> <td></td> <td></td> <td></td> <td>AP42, Table 11.9-4</td>					AP42, Table 11.9-4
Kong Nga Po Concurrent Project: Surce ID: Surce ID: Concurrent Project: Percentage active area, p Emission Rate (C12, C13, C14) 100,00 % 1.727245-08 g/m/s (unnitigated) 1.30296E-07 g/m/s (unnitigated) AP42, Table 11.9-4 Kong Nga Po Concurrent Project: Source ID: Surce ID: Same as above Percentage active area, p mission Rate (C12, C13, C14) 100,00 % 1.6172E-06 g/m/s (unnitigated) AP42, Table 11.9-4 Kong Nga Po Concurrent Project: Source ID: Surce ID: Surce ID: Percentage active area, p mission Rate (C12, C13, C14) 100,00 % 1.6172E-06 g/m/s (unnitigated) AP42, Table 11.9-4 Kong Nga Po Concurrent Project: Source ID: Source ID: Percentage active area, p mission Rate (C12, C13, C14) 100,00 % 87.5 % Assume % works area for heavy construction (From E Mitigation efficiency No. of working days per month, d No. of working hours per day, h Emission Rate for FSP Emission Rate for FSP 100,00 % 87.5 % Assume % works area for heavy construction (From EA Assume % works area for heavy construction (From EA Assume % works area for heavy construction (From EA Assume % works area for heavy construction (From EA Prom EIA Wind Erosion Concurrent Project: Source ID: Source ID: Source ID: Same as above Percentage active area, p Emission Rate for FSP Emission Rate for FSP 0.85 Mg/hectare/year 7.18483E-06 g/m²/s (unnitigated) =2.69*0.03*1000000/(10000*d*h*60*60)*p/100 Wind Erosion Same as above Percentage active ar		Same as above			
Kong Nga Po Concurrent ProjectHeavy construction Source ID: Source ID: Source ID:Percentage active area, p Emission Rate (C4, C5, C9) Emission Rate (C12, C13, C14)100 % 1.58694E-07 g/m/s (unnitigated) 1.30296E-08 g/m/s (mitigated)AP42, Table 11.9-4 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *18 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *18 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *18 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *18 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *18 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *18 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *18 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *18 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *26 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *26 *24*60*60)*p/100 *26 *			Emission Rate (C1, C2)		=0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *30
Kong Nga Po Concurrent Project: Source ID: Source ID: Source ID: Same as abovePercentage active area, p Emission Rate (C12, C13, C14)100.9% 1.56984E-07 g/m/s (unnitigated)AP42, Table 11.9-4Kong Nga Po Concurrent Project: (Phase 2)Heavy construction Source ID: Source ID: Same as abovePercentage active area, p temission Rate (C1, C2) Emission Rate (C1, C2) Emission Rate (C12, C13, C14)100.9% 0.03 Mg/hectare/year 2.4258E-06 g/m/s (unnitigated) 1.6172E-06 g/m/s (unnitigated) 1.2129E-06 g/m/s (unnitigated) 1.2129E-06 g/m/s (unnitigated) 1.2129E-06 g/m/s (unnitigated) 1.2129E-06 g/m/s (unnitigated) 1.2129E-06 g/m/s (unnitigated) 2.458E-06 g/m/s (unnitigated) 1.2129E-06 g/m/s (unnitigated) 2.458E-06 g/m/s (unnitigated) 1.2129E-06 g/m/s (unnitigated) 2.458E-06 g/m/s (unnitigated) 3.5 % 3.5			Emission Rate (C4, C5, C9)	a (a)	=0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *20
Wind Erosion for Non-Working Hours Source ID: Same as abovePercentage active area, p Emission Factor for TSP % content of FSP100 % 0.85 Mg/hectare/year 3 % of TSP 0.03 Mg/hectare/year 2.4258E-06 g/m/s (unmitigated)AP42, Table 11.9-4Kong Nga Po Concurrent Project: Organic Waste Treatment Facilities (Phase 2)Heavy construction Surce ID: Same as abovePercentage active area, p Emission Rate (C1, C2) Emission Rate (C1, C2, C3) Emission Rate (C1, C2, C3), C14)100.00 % 2.4258E-06 g/m/s (unmitigated) 1.2128E-06 g/m/s (unmitigated) 2.68 f/m/s (unmitigated) 2.25 %Assume % works area for heavy construction (From E Water suppression 8 times a day From EIA From EIAKong Nga Po Concurrent Project: (Phase 2)Heavy construction Surce ID: No. of working days per month, d Source ID: Mitigation efficiency Mo. of working days per month, d Source ID:Percentage active area, p Mitigation efficiency No. of working days per month, d Source ID: % content of FSP Emission Factor for TSP Emission Factor for TSP Emission Factor for TSP Source ID:100.00 % Assume % works area for heavy construction (From EI A from EIA From EIA From EIA From EIAWind Erosion Source ID:Percentage active area, p Mitigate active area, p Emission Factor for TSP & content of FSP Emission Factor for TSP & content of FSP Emission Factor for TSP & content of FSP100.00 % Assume Mon to Sat, 8:00 to 20:00 AP42, Section 13.2.3.3 =2.69*0.03*1000000/(10000*d*h*60*60)*p/100Wind Erosion Source ID:Percentage active area, p Emission Factor for TSP & content of FSP100.00 % Assume Mon to Sat, 8:00 to 20:00 AP42, Section 13.2.3.3<				1.73729E-08 g/m/s (mitigated)	
Non-Working Hours Source ID: Same as aboveEmission Factor for TSP % content of FSP Emission Rate (C1, C2) Emission Rate (C4, C5, C9) Emission Rate (C1, C2, C13, C14)0.85 Mg/hectare/year 3 % of TSP 2.4258E-06 g/m/s (unmitigated) 1.6172E-06 g/m/s (unmitigated) 1.2129E-06 g/m/s (unmitigated) 1.2129E-06 g/m/s (unmitigated) e.85*0.03*1000000/(10000*365*24*60*60)*p/100 *36 e.85*0.03*1000000/(10000*365*24*60*60)*p/100 *36 e.85*0.03*1000000/(10000*365*24*60*60)*p/100 *36 e.85*0.03*1000000/(10000*365*24*60*60)*p/100 *36 e.85*0.03*1000000/(10000*365*24*60*60)*p/100 *15Kong Nga Po Concurrent Project: Organic Waste (Phase 2)Heavy construction Source ID: Source ID:Percentage active area, p Mitigation efficiency No. of working days per month, d No. of working hours per day, h Emission Factor for TSP % content of FSP100.00 % 87.5 % 2.69 Mg/hectare/month of activity 3 % of TSP 0.08 Mg/hectare/year 7.18483E-06 g/m/s (unmitigated) 8.98104E-07 g/m²/s (mitigated)Assume % works area for heavy construction (From El Form EIA From EIA, assume Mon to Sat, 8:00 to 20:00 AP42, Section 13.2.3.3Wind Erosion Source ID: Same as abovePercentage active area, p Emission Factor for TSP % content of FSP Emission Factor for TSP % content of FSP0.08 Mg/hectare/year 3 % of TSP 0.08 Mg/hectare/yearAP42, Table 11.9-4Wind Erosion Source ID: Same as abovePercentage active area, p Emission Factor for TSP % content of FSP Emission Factor for TSP % content of FSP0.85 Mg/hectare/year 3 % of TSPAP42, Table 11.9-4Wind Erosion Source ID: Same as abovePercentage active area, p Emission Factor for TSP % content of FSP Emission Factor for TSP <td></td> <td></td> <td>Emission Rate (C12, C13, C14)</td> <td></td> <td>=0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *15</td>			Emission Rate (C12, C13, C14)		=0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *15
Source ID: Same as above% content of FSP Emission Rate (C1, C2) Emission Rate (C4, C5, C9) Emission Rate (C1, C1, C1, C1)3 % of TSP 0.03 Mg/hectare/year 2.4258E-06 g/m/s (unmitigated) 1.6172E-06 g/m/s (unmitigated) =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *36 =0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *36 #24*60*60)*p/100 *36 #24*60*60)*p/100 *36 #24*60*60)*p/100 *36 #26 days #7 m EIA #7 m EIA *7 m EIA *			•		
Same as aboveEmission Factor for FSP Emission Rate (C1, C2) Emission Rate (C4, C5, C9) Emission Rate (C12, C13, C14)0.03 Mg/hectare/year 2.4258E-06 g/m/s (unmitigated) E.450.03*100000/(10000*365*24*60*60)*p/100 *26 =0.85*0.03*100000/(10000*365*24*60*60)*p/100 *26 #00.04 working days per month, d 2.66 days From EIA S2 - S7Percentage active area, p Mitigation efficiency No. of working days per month, d Emission Factor for TSP & 0.08 Mg/hectare/year 7.18483E-06 g/m*/s (unmitigated) 8.98104E-07 g/m*/s (unmitigated) 8.98104E-07 g/m*/s (unmitigated) 8.98104E-07 g/m*/s (imitigated)Assume Mon to Sat, 8:00 to 20:00 AP42, Section 13.2.3.3 =2.69*0.03*100000/(10000*d*h*60*60)*p/100Wind Erosion Source ID: Same as abovePercentage active area, p Emission Factor for TSP % content of FSP100.00 % 3 % of TSP 0.03 Mg/hectare/yearAP42, Table 11.9-4		-		• •	AP42, Table 11.9-4
Kong Nga Po Concurrent Project: Organic Waste (Phase 2)Heavy construction Source ID: No. of working days per month, d No. of working days per month			Emission Factor for FSP	0.03 Mg/hectare/year	
Emission Rate (C12, C13, C14)1.2129E-06 g/m/s (unmitigated)=0.85*0.03*100000/(10000*365*24*60*60)*p/100*15Kong Nga Po Concurrent Project: Organic Waste Treatment Facilities (Phase 2)Heavy construction Source ID:Percentage active area, p Mitigation efficiency No. of working days per month, d Source ID:100.00 % 87.5 % No. of working days per month, d 2.6 daysAssume % works area for heavy construction (From E Water suppression 8 times a day From EIA From EIA From EIA, assume Mon to Sat, 8:00 to 20:00 AP42, Section 13.2.3.3Wind Erosion Source ID: Same as abovePercentage active area, p Emission Factor for TSP Emission Factor for TSP Emission Factor for TSP Mitigate0100.00 % 8.8104E-07 g/m²/s (unmitigated) 8.98104E-07 g/m²/s (mitigated)Assume % works area for heavy construction (From E Water suppression 8 times a day From EIA From EIA, assume Mon to Sat, 8:00 to 20:00 AP42, Section 13.2.3.3Wind Erosion Source ID: Same as abovePercentage active area, p Emission Factor for TSP & 0.85 Mg/hectare/year 3 % of TSP Bernission Factor for TSP % content of FSP Emission Factor for TSP % content of FSP Emission Factor for TSP % content of FSP Bernission Factor for TSP Bernission Factor for FSP Bernission Factor for FSP Bernission Factor for FSP Bern			· · · ·		· · · · · ·
Concurrent Project: Source ID: Mitigation efficiency 87.5 % Water suppression 8 times a day Organic Waste S2 - S7 No. of working hours per day, h 26 days From EIA Treatment Facilities S2 - S7 No. of working hours per day, h 12 hour AP42, Section 13.2.3.3 (Phase 2) Wind Erosion Emission Factor for FSP 0.08 Mg/hectare/year 7.18483E-06 g/m²/s (unmitigated) =2.69*0.03*1000000/(10000*d*h*60*60)*p/100 Wind Erosion Percentage active area, p 100.00 % =2.69*0.03*1000000/(10000*d*h*60*60)*p/100 Same as above Emission Factor for TSP 0.85 Mg/hectare/year AP42, Table 11.9-4 Wind Erosion Emission Factor for TSP 0.03 Mg/hectare/year AP42, Table 11.9-4					=0.85*0.03*1000000/(10000*365*24*60*60)*p/100 *15
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Same as aboveEmission Factor for TSP0.85 Mg/hectare/yearAP42, Table 11.9-4% content of FSP3 % of TSPEmission Factor for FSP0.03 Mg/hectare/year			Percentage active area, p	100.00 %	
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Details of Dust Emission Sources for Daily and Annual FSP Assessment

Kong Nga Po - Feasibility Study

Description	Sources	Parameter	Er	mission Rate	Remarks
Concurrent Project:	Material handling and storage piles Source ID: S1 & S8	Percentage open stockpile area, p	20	%	From EIA: 80% stockpiling area is covered by impervious sheets and all dusty material should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.
(Phase 2)		Particle size multiplier, k	0.053		k (particle size < 2.5μm)
		Moisture content, M	5		Asuume made by engineer, worst case scenario
C&D Stockpile Area		Average wind speed, U	2.5	Im/s	Annual mean wind speed from mm5 year 2010 (date 2 Jan to 30 Dec)
		Emission Factor, E	2.77621E-05	0 0	E=k*0.0016*[(U/2.2)^1.3/(M/2)^1.4] From engineer
		Maximum daily average output	106.8	m³/day	Total volume of output: 25,000 m ³ Anticipated dusty construction activities duration: 9 months (assume 26 working days per month)
		Maximum hourly average output, op	8.9	m³/hr	12 hours per day
		Area of the stockpile, A Emission Rate	4012.08 4.27822E-08	m ² g/m²/s (unmitigated)	Assume capacity of dump truck is 6m ³ and 15 tons Assumption made by consultant Unmitigated Emission Rate=E*1000*op/(A*60*60) Mitigated Emission Rate'=E*1000*op/(A*60*60)*p/100
	Wind erosion	Percentage open stockpile area, p		% (unmitigated)	
	As above	Emission Factor Emission Rate	0.85 2.69533E-06		80% stockpiling area is covered by impervious sheets AP42, Table 11.9.4 =0.85*1000000/(10000*365*24*60*60)*p/100

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