

## **APPENDIX – 5-1**

### **Calculation of Dust Emission Factors**

### Calculation of Emission factor for Heavy Construction

E = 1.2tons/acre/month of activity (ref: AP-42 S13.2.3.3)  
or = 2.69Mg/hectare/month of activity

Where

E = Emission Factor

Assume

Percentage active operating area (%)	30	usual practice for typical construction site
Mitigation efficiency (%)	0	*0% for Do-nothing, 50% efficiency for watering twice daily
E (g/sq.m/day)	3.1038	Assume 26 working days per month and 12 working hours a day
E (g/sq.m/s)	<b>7.18483E-05</b>	calculated, 12 working hours per day

### Calculation of Emission factor for Wind Erosion

$$E = 0.85\text{Mg/hectare/yr}$$

(ref : AP-42 S11.9, Table 11.9.4)

Where

E = Emission Factor

Assume

Percentage active operating area (%)	30	usual practice for typical construction site
Mitigation efficiency (%)	0	*0% for Do-nothing, 50% efficiency for watering twice daily
E (g/sqm/day)	0.069863014	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	<b>8.086E-07</b>	calculated, 24-hour emission

**Calculation of Emission factor for Loading/Unloading at Barging Point**

$$E = k(0.0016) \frac{\left(\frac{U}{2.2}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (kg / megagram )}$$

where

- E = Emission Factor in kg/megagram (Ref. AP42 S13.2.4)
- k = Particle size multiplier, k = 0.74 as defined according to Table 2 of S13.2.4
- U = Average wind speed at HKO Station from 1999 to 2001 (i.e. ~2.8m/s)
- M = material moisture content; 2% is assumed in the equation

$$E = 0.74 \times (0.0016) \times (2.8/2.2)^{1.3}/(2/2)^{1.4}$$

$$= 0.00162 \quad \text{kg/megagram}$$

No. of trucks loading/unloading at the barging point =	43 per hour	(provided by Scheme Designer)
Average carrying capacity for each truck =	16 tonne	
Quantity of excavated materials loading at barging point =	688 megagram per hour	
Total area at barging facility =	5387 sq m	(estimated from the drawing)

$$E = 0.00162 \quad \text{kg/megagram}$$

$$= 1114.5411 \quad \text{g/hour}$$

$$= 0.3096 \quad \text{g/s}$$

$$= \mathbf{5.7471E-05} \quad \text{g/sqm/s}$$

**Calculation of Emission factor for Loading/Unloading at Stockpiles**

$$E = k(0.0016) \frac{\left(\frac{U}{2.2}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (kg / megagram )}$$

where

- E = Emission Factor in kg/megagram (Ref. AP42 S13.2.4)
- k = Particle size multiplier, k = 0.74 as defined according to Table 2 of S13.2.4
- U = Average wind speed at HKO Station from 1999 to 2001 (i.e. ~2.8m/s)
- M = material moisture content; 2% is assumed in the equation

$$E = 0.74 \times (0.0016) \times (2.8/2.2)^{1.3}/(2/2)^{1.4}$$

$$= 0.00162 \quad \text{kg/megagram}$$

No. of trucks loading/unloading at the stockpile = 6 per hour (assume 6 trucks per hour will be loaded and unloaded)  
 Average carrying capacity for each truck = 16 tonne  
 Quantity of excavated materials loading at the stockpile = 96 megagram per hour

$$E = 0.00162 \quad \text{kg/megagram}$$

$$= 155.5174 \quad \text{g/hour}$$

$$= 0.0432 \quad \text{g/s}$$

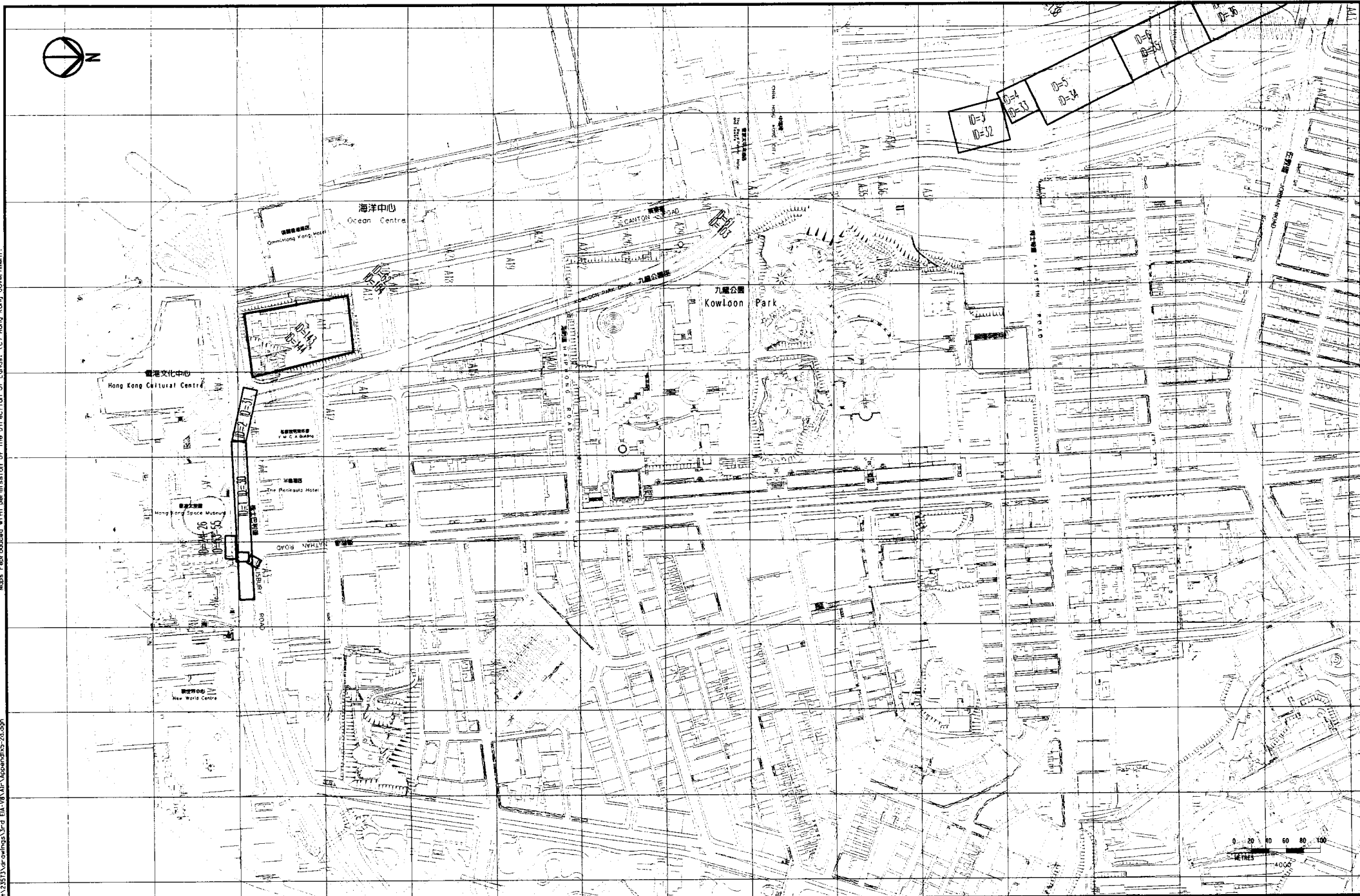
	<b>Total Area of Si</b>	<b>E, g/sqm/s</b>
Stockpile 1	4903.8	<b>8.8093E-06</b>
Stockpile 2	3375	<b>1.2800E-05</b>
Stockpile 3	624	<b>6.9230E-05</b>
Stockpile 4	297	<b>1.4545E-04</b>
Stockpile 5	5700.76	<b>7.5778E-06</b>
Stockpile 6	5186.74	<b>8.3288E-06</b>
Stockpile 7	2261	<b>1.9106E-05</b>
Stockpile 8	12198	<b>3.5415E-06</b>
Stockpile 9		<b>Not used</b>
Stockpile 10	6465.52	<b>6.6815E-06</b>
Stockpile 11	4320	<b>9.9998E-06</b>

## **APPENDIX – 5-2**

Locations of Air Sensitive Receivers,  
Worksites and Dust Emission Rates



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REV	DATE	BY	SUB	APP	DESCRIPTION
△	DEC2003	SW	FC	ST	EIA REPORT
△	NOV2003	SW	FC	ST	EIA REPORT
△	30MAY2003	SW	FC	ST	EIA REPORT
△	11OCT2002	SW	FC	ST	EIA REPORT (1ST DRAFT)

DESIGNED BY	SW
DRAWN BY	RL
CHECKED BY	FC
IN CHARGE	ST
DATE	5 DEC 2003

### New Railway Projects

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Ove Arup & Partners Hong Kong Limited **ARUP**

**KOWLOON SOUTHERN LINK KSL GSA-5100**  
EIA & ASSOCIATED SERVICES

**LOCATIONS OF ASR ASSESSMENT POINTS AND EMISSION SOURCES**

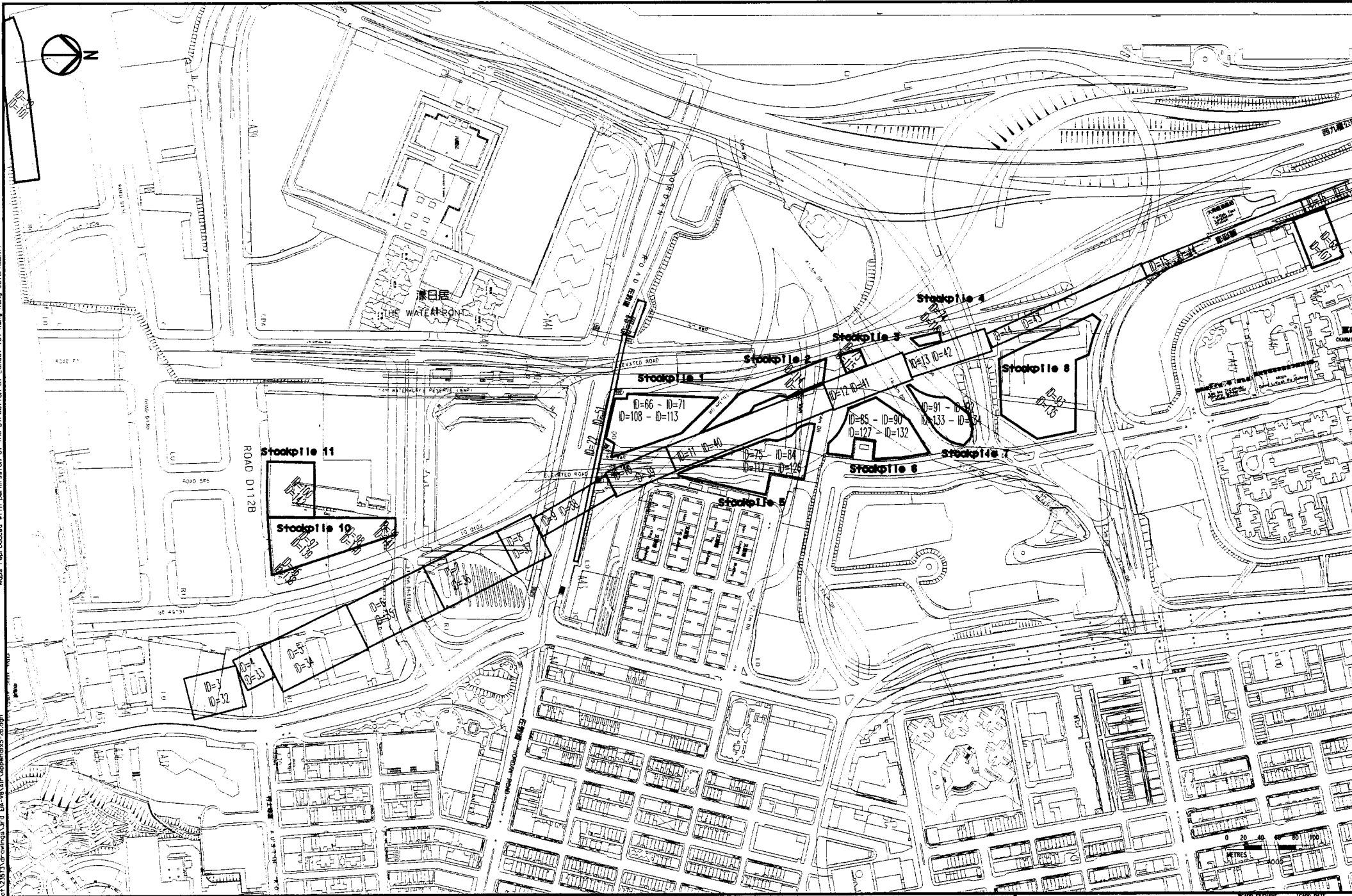
DRAWN DATE: 5 DEC 2003

SCALE: 1 : 4000 @ A3

DRAWING NUMBER: **APPENDIX 5-2**

SHEET NO: **1 OF 3** | STAGE CODE: **P** | REV: **E**

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REV	DATE	BY	SUB	APP	DESCRIPTION

REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY	SW
DRAWN BY	RL
CHECKED BY	
IN CHARGE	ST
DATE	5 DEC 2003

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**KOWLOON SOUTHERN LINK KSL GSA-5100**  
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**LOCATIONS OF ASR ASSESSMENT POINTS AND EMISSION SOURCES**

APPENDIX 5-2

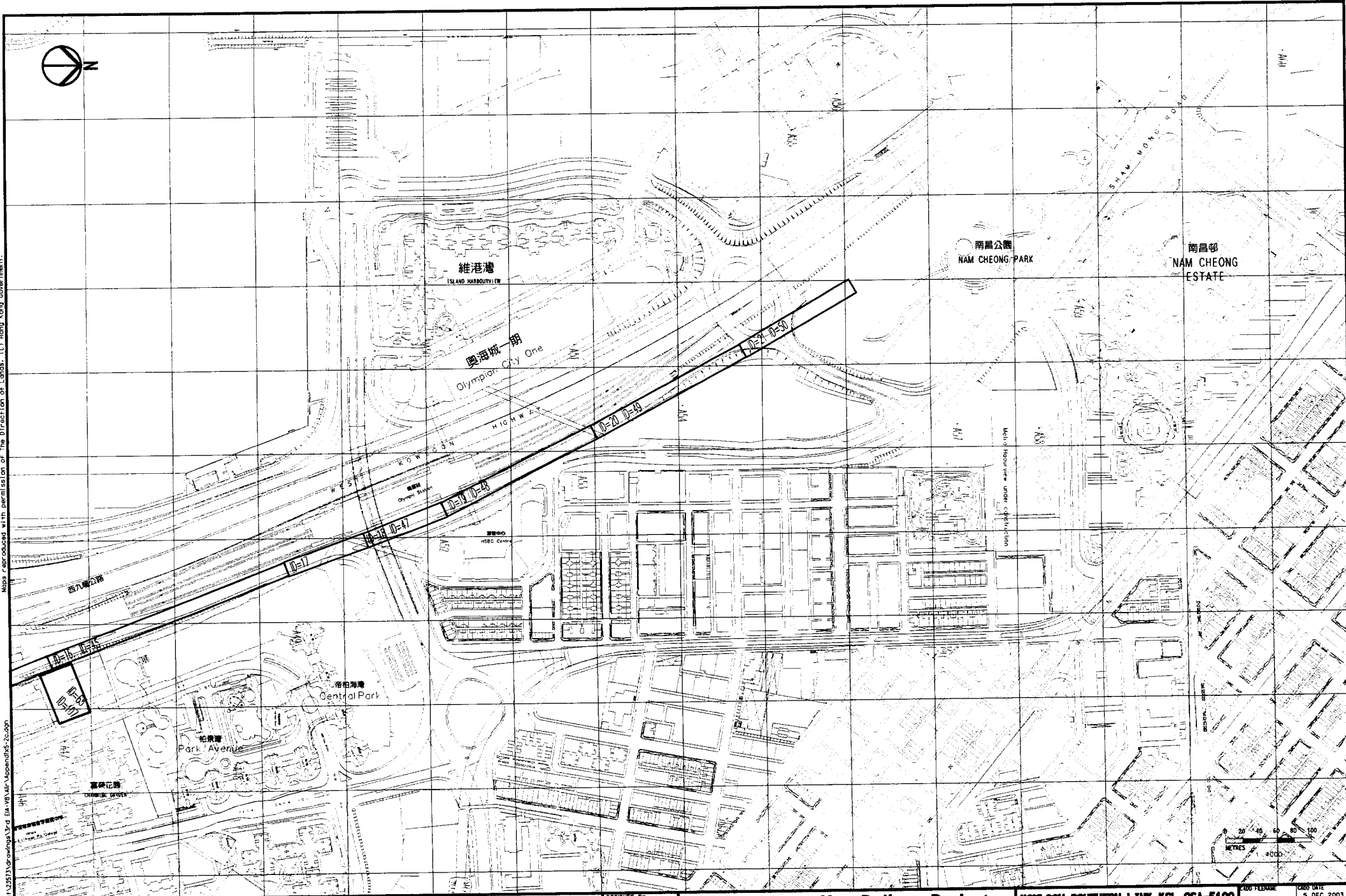
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APP. REFERENCE	DATE
SCALE	1 : 4000 @ A3
DRAWING NUMBER	
STAGE CODE	REV



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REV	DATE	BY	SUB	APP	DESCRIPTION

REV	DATE	BY	SUB	APP	DESCRIPTION
▲	DEC2003	SW	FC	ST	EIA REPORT
▲	NOV2003	SW	FC	ST	EIA REPORT
▲	30MAY2003	SW	FC	ST	EIA REPORT
▲	7MAR2003	SW	FC	ST	EIA REPORT (2ND DRAFT)
▲	11OCT2002	SW	FC	ST	EIA REPORT (1ST DRAFT)

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 IN CHARGE ST  
 DATE 5 DEC 2003



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Ove Arup & Partners Hong Kong Limited



**KOWLOON SOUTHERN LINK KSL GSA-5100**  
**EIA & ASSOCIATED SERVICES**  
**LOCATIONS OF ASR ASSESSMENT POINTS**  
**AND EMISSION SOURCES**

PROJECT NAME	KOOW DATE
SCALE	5 DEC 2003
DRAWING NUMBER	1 : 4000 @ A3
<b>APPENDIX 5-2</b>	
SHEET NO	STAGE CODE REV
3 of 3	P E

Summary of dust emission sources for KSL

Source ID	Tunnel section	Dust emission source	Watering frequency	Source Type	Emission	x-start	y-start	x-end/x-width	y-end/y-width	Ht	width/angle
1	Worksite 1A - 1	heavy construction	twice per day	12	6.0578E-04	835867.4	817310.3	835681.0	817301.2	0	16.9
2	Worksite 1A - 2	heavy construction	twice per day	12	5.7860E-04	835681.0	817301.2	835619.5	817315.1	0	16.1
3	West Kowloon Station - 1	heavy construction	4 times per day	12	8.8018E-04	835323.0	818140.9	835308.0	818201.6	0	49.0
4	West Kowloon Station - 2	heavy construction	4 times per day	12	7.0560E-04	835295.5	818200.9	835277.5	818237.1	0	39.3
5	West Kowloon Station - 3	heavy construction	4 times per day	12	1.0535E-03	835288.7	818237.9	835239.0	818338.4	0	58.6
6	West Kowloon Station - 4	heavy construction	4 times per day	12	1.0068E-03	835239.0	818338.4	835193.8	818429.7	0	56.0
7	West Kowloon Station - 5	heavy construction	4 times per day	12	1.0003E-03	835193.8	818429.7	835150.8	818515.9	0	55.7
8	West Kowloon Station - 6	heavy construction	4 times per day	12	9.8485E-04	835150.8	818515.9	835130.9	818555.8	0	54.8
9	Tunnels from WKN station to NAC - 1	heavy construction	twice per day	12	8.8112E-04	835122.0	818552.2	835071.6	818639.1	0	24.5
10	Tunnels from WKN station to NAC - 2	heavy construction	twice per day	12	1.1187E-03	835071.6	818639.1	835041.3	818710.0	0	31.1
11	Tunnels from WKN station to NAC - 3	heavy construction	twice per day	12	1.0994E-03	835041.3	818710.0	834968.4	818896.5	0	30.6
12	Tunnels from WKN station to NAC - 4	heavy construction	twice per day	12	1.2191E-03	834968.4	818896.5	834932.7	818989.7	0	33.9
13	Tunnels from WKN station to NAC - 5	heavy construction	twice per day	12	1.0183E-03	834932.7	818989.7	834901.8	819084.4	0	28.3
14	Tunnels from WKN station to NAC - 6	heavy construction	twice per day	12	6.3015E-04	834902.7	819085.7	834819.5	819267.5	0	17.5
15	Tunnels from WKN station to NAC - 7	heavy construction	twice per day	12	5.8764E-04	834819.5	819267.5	834745.1	819452.7	0	16.4
16	Tunnels from WKN station to NAC - 8	heavy construction	twice per day	12	5.8399E-04	834745.1	819452.7	834636.5	819732.8	0	16.3
17	Tunnels from WKN station to NAC - 9	heavy construction	twice per day	12	6.5001E-04	834636.5	819732.8	834602.7	819827.0	0	18.1
18	Tunnels from WKN station to NAC - 10	heavy construction	twice per day	12	6.7407E-04	834602.7	819827.0	834567.2	819920.4	0	18.8
19	Tunnels from WKN station to NAC - 11	heavy construction	twice per day	12	6.4054E-04	834567.2	819920.4	834476.9	820099.5	0	17.8
20	Tunnels from WKN station to NAC - 12	heavy construction	twice per day	12	6.2475E-04	834476.9	820099.5	834382.1	820277.4	0	17.4
21	Tunnels from WKN station to NAC - 13	heavy construction	twice per day	12	6.4663E-04	834382.1	820277.4	834306.6	820408.6	0	18.0
22	Footbridge F14-1	heavy construction	twice per day	12	1.7962E-04	835162.5	818597.2	834894.2	818656.4	0	5.0
23	Footbridge F14-2	heavy construction	twice per day	12	3.5924E-04	834895.7	818662.2	834854.3	818676.6	0	10.0
24	Salisbury Road Subway - 1	heavy construction	twice per day	12	5.2559E-06	835823.3	817319.3	835818.1	817311.3	0	6.5
25	Salisbury Road Subway - 2	heavy construction	twice per day	12	5.2559E-06	835818.1	817311.3	835819.5	817290.5	0	6.5
26	Salisbury Road Subway - 3	heavy construction	twice per day	12	5.2559E-06	835819.5	817290.5	835798.7	817289.1	0	6.5
30	Worksite 1A - 1	wind erosion	twice per day	12	6.8177E-06	835867.4	817310.3	835681.0	817301.2	0	16.9
31	Worksite 1A - 2	wind erosion	twice per day	12	6.5118E-06	835681.0	817301.2	835619.5	817315.1	0	16.1
32	West Kowloon Station - 1	wind erosion	4 times per day	12	9.9058E-06	835323.0	818140.9	835308.0	818201.6	0	49.0
33	West Kowloon Station - 2	wind erosion	4 times per day	12	7.9410E-06	835295.5	818200.9	835277.5	818237.1	0	39.3
34	West Kowloon Station - 3	wind erosion	4 times per day	12	1.1856E-05	835288.7	818237.9	835239.0	818338.4	0	58.6
35	West Kowloon Station - 4	wind erosion	4 times per day	12	1.1330E-05	835239.0	818338.4	835193.8	818429.7	0	56.0
36	West Kowloon Station - 5	wind erosion	4 times per day	12	1.1258E-05	835193.8	818429.7	835150.8	818515.9	0	55.7
37	West Kowloon Station - 6	wind erosion	4 times per day	12	1.1084E-05	835150.8	818515.9	835130.9	818555.8	0	54.8
38	Tunnels from WKN station to NAC - 1	wind erosion	twice per day	12	9.9164E-06	835122.0	818552.2	835071.6	818639.1	0	24.5
39	Tunnels from WKN station to NAC - 2	wind erosion	twice per day	12	1.2590E-05	835071.6	818639.1	835041.3	818710.0	0	31.1
40	Tunnels from WKN station to NAC - 3	wind erosion	twice per day	12	1.2373E-05	835041.3	818710.0	834968.4	818896.5	0	30.6
41	Tunnels from WKN station to NAC - 4	wind erosion	twice per day	12	1.3720E-05	834968.4	818896.5	834932.7	818989.7	0	33.9
42	Tunnels from WKN station to NAC - 5	wind erosion	twice per day	12	1.1460E-05	834932.7	818989.7	834901.8	819084.4	0	28.3
43	Tunnels from WKN station to NAC - 6	wind erosion	twice per day	12	7.0919E-06	834902.7	819085.7	834819.5	819267.5	0	17.5
44	Tunnels from WKN station to NAC - 7	wind erosion	twice per day	12	6.6135E-06	834819.5	819267.5	834745.1	819452.7	0	16.4
45	Tunnels from WKN station to NAC - 8	wind erosion	twice per day	12	6.5724E-06	834745.1	819452.7	834636.5	819732.8	0	16.3
46	Tunnels from WKN station to NAC - 9	wind erosion	twice per day	12	7.3154E-06	834636.5	819732.8	834602.7	819827.0	0	18.1
47	Tunnels from WKN station to NAC - 10	wind erosion	twice per day	12	7.5862E-06	834594.6	819850.8	834567.2	819920.4	0	18.8
48	Tunnels from WKN station to NAC - 11	wind erosion	twice per day	12	7.2088E-06	834567.2	819920.4	834476.9	820099.5	0	17.8
49	Tunnels from WKN station to NAC - 12	wind erosion	twice per day	12	7.0312E-06	834476.9	820099.5	834382.1	820277.4	0	17.4
50	Tunnels from WKN station to NAC - 13	wind erosion	twice per day	12	7.2774E-06	834382.1	820277.4	834306.6	820408.6	0	18.0
51	Footbridge F14-1	wind erosion	twice per day	12	2.0215E-06	835162.5	818597.2	834894.2	818656.4	0	5.0
52	Footbridge F14-2	wind erosion	twice per day	12	4.0430E-06	834895.7	818662.2	834854.3	818676.6	0	10.0

Source ID	Tunnel section	Dust emission source	Watering frequency	Source Type	Emission	x-start	y-start	x-end/x-width	y-end/y-width	Ht	width/angle
53	Salisbury Road Subway - 1	wind erosion	twice per day	12	2.6279E-06	835823.3	817319.3	835818.1	817311.3	0	6.5
54	Salisbury Road Subway - 2	wind erosion	twice per day	12	2.6279E-06	835818.1	817311.3	835819.5	817290.5	0	6.5
55	Salisbury Road Subway - 3	wind erosion	twice per day	12	2.6279E-06	835819.5	817290.5	835798.7	817289.1	0	6.5
59	Barging Point (Loading and unloading)	loading/unloading	twice per day	13	2.8735E-05	834612.7	817939.9	171	30	0	8.0
61	North Vent Build	heavy construction	twice per day	13	3.5924E-05	835418.9	817861.2	11	10	0	11.0
62	Deassambling Shaft	heavy construction	twice per day	13	3.5924E-05	835482.3	817457.0	17	44	0	14.0
65	YMT Vent	heavy construction	twice per day	13	3.5924E-05	834781.1	819471.6	61	40	0	21.9
66	Stockpile 1-1	loading/unloading	twice per day	13	4.4047E-06	835031.2	818654.3	11.2	29	0	0.0
67	Stockpile 1-2	loading/unloading	twice per day	13	4.4047E-06	834997.5	818665.9	54	41	0	0.0
68	Stockpile 1-3	loading/unloading	twice per day	13	4.4047E-06	834992.3	818700.0	49	25	0	0.0
69	Stockpile 1-4	loading/unloading	twice per day	13	4.4047E-06	834988.3	818719.3	40	16	0	0.0
70	Stockpile 1-5	loading/unloading	twice per day	13	4.4047E-06	834981.9	818738.1	23	16	0	0.0
71	Stockpile 1-6	loading/unloading	twice per day	13	4.4047E-06	834974.2	818751.0	12	11	0	0.0
72	Stockpile 2	loading/unloading	twice per day	13	6.3999E-06	834954.6	818843.6	25	135	0	25.0
73	Stockpile 3	loading/unloading	twice per day	13	3.4615E-05	834926.1	818926.3	24	26	0	22.7
74	Stockpile 4	loading/unloading	twice per day	13	7.2726E-05	834901.6	819012.0	11	27	0	16.7
75	Stockpile 5-1	loading/unloading	twice per day	13	3.7889E-06	835059.5	818732.3	10	7	0	344.0
76	Stockpile 5-2	loading/unloading	twice per day	13	3.7889E-06	835059.0	818743.5	15.7	12.9	0	344.0
77	Stockpile 5-3	loading/unloading	twice per day	13	3.7889E-06	835063.5	818786.9	24	75	0	344.0
78	Stockpile 5-4	loading/unloading	twice per day	13	3.7889E-06	835043.8	818774.0	8.5	13	0	344.0
79	Stockpile 5-5	loading/unloading	twice per day	13	3.7889E-06	835043.3	818787.8	16	13	0	344.0
80	Stockpile 5-6	loading/unloading	twice per day	13	3.7889E-06	835041.9	818806.8	25	23	0	344.0
81	Stockpile 5-7	loading/unloading	twice per day	13	3.7889E-06	835027.9	818815.2	6.5	13.9	0	344.0
82	Stockpile 5-8	loading/unloading	twice per day	13	3.7889E-06	835041.9	818845.8	39	53	0	344.0
83	Stockpile 5-9	loading/unloading	twice per day	13	3.7889E-06	835016.9	818855.0	12.6	9.8	0	344.0
84	Stockpile 5-10	loading/unloading	twice per day	13	3.7889E-06	835013.8	818869.0	25.5	17.8	0	344.0
85	Stockpile 6-1	loading/unloading	twice per day	13	4.1644E-06	835027.7	818911.0	23.5	29.4	0	350.0
86	Stockpile 6-2	loading/unloading	twice per day	13	4.1644E-06	835003.1	818952.5	34	72.4	0	350.0
87	Stockpile 6-3	loading/unloading	twice per day	13	4.1644E-06	834981.5	818953.3	10	41.4	0	350.0
88	Stockpile 6-4	loading/unloading	twice per day	13	4.1644E-06	835017.1	818992.7	16.6	12	0	350.0
89	Stockpile 6-5	loading/unloading	twice per day	13	4.1644E-06	835021.7	819000.8	9.2	6.2	0	350.0
90	Stockpile 6-6	loading/unloading	twice per day	13	4.1644E-06	835034.7	818983.8	22	62	0	351.0
91	Stockpile 7-1	loading/unloading	twice per day	13	9.5531E-06	834968.5	819003.6	20	12.3	0	39.7
92	Stockpile 7-2	loading/unloading	twice per day	13	9.5531E-06	834998.9	819037.5	65	31	0	39.7
93	Stockpile 8	loading/unloading	twice per day	13	1.7708E-06	834966.4	819151.4	114	107	0	0.0
96	Stockpile 10-1	loading/unloading	twice per day	13	3.3407E-06	835164.1	818249.8	15	24.8	0	0.0
97	Stockpile 10-2	loading/unloading	twice per day	13	3.3407E-06	835132.7	818269.4	47.6	70.7	0	0.0
98	Stockpile 10-3	loading/unloading	twice per day	13	3.3407E-06	835127.4	818324.4	40	36.6	0	0.0
99	Stockpile 10-4	loading/unloading	twice per day	13	3.3407E-06	835120.5	818364.9	21	60.2	0	0.0
100	Stockpile 11	loading/unloading	twice per day	13	4.9999E-06	835068.5	818261.1	80	54	0	0.0
101	Barging Point (Loading and unloading)	wind erosion	twice per day	13	4.0430E-07	834612.7	817939.9	171	30	0	8.0
103	North Vent Build	wind erosion	twice per day	13	4.0430E-07	835418.9	817861.2	11	10	0	11.0
104	Deassambling Shaft	wind erosion	twice per day	13	4.0430E-07	835482.3	817457.0	17	44	0	14.0
107	YMT Vent	wind erosion	twice per day	13	4.0430E-07	834781.1	819471.6	61	40	0	21.9
108	Stockpile 1-1	wind erosion	twice per day	13	4.0430E-07	835031.2	818654.3	11.2	29	0	0.0
109	Stockpile 1-2	wind erosion	twice per day	13	4.0430E-07	834997.5	818665.9	54	41	0	0.0
110	Stockpile 1-3	wind erosion	twice per day	13	4.0430E-07	834992.3	818700.0	49	25	0	0.0
111	Stockpile 1-4	wind erosion	twice per day	13	4.0430E-07	834988.3	818719.3	40	16	0	0.0
112	Stockpile 1-5	wind erosion	twice per day	13	4.0430E-07	834981.9	818738.1	23	16	0	0.0
113	Stockpile 1-6	wind erosion	twice per day	13	4.0430E-07	834974.2	818751.0	12	11	0	0.0
114	Stockpile 2	wind erosion	twice per day	13	4.0430E-07	834954.6	818843.6	25	135	0	25.0

Source ID	Tunnel section	Dust emission source	Watering frequency	Source Type	Emission	x-start	y-start	x-end/x-width	y-end/y-width	Ht	width/angle
115	Stockpile 3	wind erosion	twice per day	13	4.0430E-07	834926.1	818926.3	24	26	0	22.7
116	Stockpile 4	wind erosion	twice per day	13	4.0430E-07	834901.6	819012.0	11	27	0	16.7
117	Stockpile 5-1	wind erosion	twice per day	13	4.0430E-07	835059.5	818732.3	10	7	0	344.0
118	Stockpile 5-2	wind erosion	twice per day	13	4.0430E-07	835059.0	818743.5	15.7	12.9	0	344.0
119	Stockpile 5-3	wind erosion	twice per day	13	4.0430E-07	835063.5	818786.9	24	75	0	344.0
120	Stockpile 5-4	wind erosion	twice per day	13	4.0430E-07	835043.8	818774.0	8.5	13	0	344.0
121	Stockpile 5-5	wind erosion	twice per day	13	4.0430E-07	835043.3	818787.8	16	13	0	344.0
122	Stockpile 5-6	wind erosion	twice per day	13	4.0430E-07	835041.9	818806.8	25	23	0	344.0
123	Stockpile 5-7	wind erosion	twice per day	13	4.0430E-07	835027.9	818815.2	6.5	13.9	0	344.0
124	Stockpile 5-8	wind erosion	twice per day	13	4.0430E-07	835041.9	818845.8	39	53	0	344.0
125	Stockpile 5-9	wind erosion	twice per day	13	4.0430E-07	835016.9	818855.0	12.6	9.8	0	344.0
126	Stockpile 5-10	wind erosion	twice per day	13	4.0430E-07	835013.8	818869.0	25.5	17.8	0	344.0
127	Stockpile 6-1	wind erosion	twice per day	13	4.0430E-07	835027.7	818911.0	23.5	29.4	0	350.0
128	Stockpile 6-2	wind erosion	twice per day	13	4.0430E-07	835003.1	818952.5	34	72.4	0	350.0
129	Stockpile 6-3	wind erosion	twice per day	13	4.0430E-07	834981.5	818953.3	10	41.4	0	350.0
130	Stockpile 6-4	wind erosion	twice per day	13	4.0430E-07	835017.1	818992.7	16.6	12	0	350.0
131	Stockpile 6-5	wind erosion	twice per day	13	4.0430E-07	835021.7	819000.8	9.2	6.2	0	350.0
132	Stockpile 6-6	wind erosion	twice per day	13	4.0430E-07	835034.7	818983.8	22	62	0	351.0
133	Stockpile 7-1	wind erosion	twice per day	13	4.0430E-07	834968.5	819003.6	20	12.3	0	39.7
134	Stockpile 7-2	wind erosion	twice per day	13	4.0430E-07	834998.9	819037.5	65	31	0	39.7
135	Stockpile 8	wind erosion	twice per day	13	4.0430E-07	834966.4	819151.4	114	107	0	0.0
138	Stockpile 10-1	wind erosion	twice per day	13	4.0430E-07	835164.1	818249.8	15	24.8	0	0.0
139	Stockpile 10-2	wind erosion	twice per day	13	4.0430E-07	835132.7	818269.4	47.6	70.7	0	0.0
140	Stockpile 10-3	wind erosion	twice per day	13	4.0430E-07	835127.4	818324.4	40	36.6	0	0.0
141	Stockpile 10-4	wind erosion	twice per day	13	4.0430E-07	835120.5	818364.9	21	60.2	0	0.0
142	Stockpile 11	wind erosion	twice per day	13	4.0430E-07	835068.5	818261.1	80	54	0	0.0
143	FMPHQ	heavy construction	4 times per day	13	7.7100E-06	835554.0	817373.0	90	130	5	11.9
144	FMPHQ	wind erosion	4 times per day	13	6.7300E-07	835554.0	817373.0	90	130	5	11.9

Note : For locations of sources, please refer to the drawing  
For source type, 12 represent line source; 13 represent area source

## **APPENDIX – 5-3**

Dust Assessment Results  
(Unmitigated Scenario for Construction of KSL)





## **APPENDIX – 5-4**

Dust Assessment Results  
(Mitigated Scenario for Construction of KSL)







## **APPENDIX – 5-5**

Dust Assessment Results  
(Cumulative Dust Concentrations for Both KSL and FMPHQ)



