

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of TSP for Heavy Construction (Under Unmitigated Scenario)

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

Where

E = Emission factor

Assume

For 1-hour an 24-hour Emission:

Unmitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%):	0.00%	unmitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	10.3462	assume 26 working days per month
E (g/sq.m/s):	0.000239494	calculated, 12 working hours per day

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of TSP for Wind Erosion (Under Unmitigated Scenario)

E = 0.85 Mg/hectare/yr (ref : AP-42 S11.9, Table 11.9.4)

Where

E = Emission factor

Assume

For 1-hour and 24-hour Emission:

Unmitigated (Non-working Hours)

Active operating area (%)	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%)	0.00%	no mitigation measure during non-working hours
E (g/sqm/day)	0.232876712	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000026953	calculated, 24-hour emission

Unmitigated (Day Time)

Active operating area (%)	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%)	0.00%	unmitigated
E (g/sqm/day)	0.232876712	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000026953	calculated, 24-hour emission

Project: 227724 Development of Anderson Road Quarry - Investigation
Calculation of Emission factor of TSP for Material Handling at Stockpile
 According to Section 13.2.4 of AP-42

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

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 from 2007 to 2011 (i.e. ~3.344m/s) , Hong Kong Observatory (Kwun Tong Weather Monitoring Station)
- M = Material moisture content - 2%

$$E = 0.74 \times (0.0016) \times (3.344/2.2)^{1.3}/(2/2)^{1.4}$$

= 0.00204 kg/megagram

No. of trucks loading/unloading at stockpile =	30 per hour
Average carrying capacity for each truck =	15 tonne
Quantity of excavated materials loading at barging point =	450 megagram per hour
Mitigation efficiency (%) =	50.00% watering once per hour

$$\begin{aligned} \text{Emission Rate} &= 0.00204 \times 450 \times (1 - 0.5) \\ &= 0.45912 \text{ kg/hour} \\ &= \mathbf{0.12753 \text{ g/s}} \end{aligned}$$

Mitigated (Day Time)

For Stockpile Area

Emission Rate =	0.12753 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.000008145 g/sq.m/s

Unmitigated (Day Time)

For Stockpile Area

Emission Rate =	0.25507 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.000016291 g/sq.m/s

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of TSP for Heavy Construction (Under Mitigated Scenario)

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

Where

E = Emission factor

Assume

For 1-hour an 24-hour Emission:

Mitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%):	91.70%	Mitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	0.8587	assume 26 working days per month
E (g/sq.m/s):	0.000019878	calculated, 12 working hours per day

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of TSP for Wind Erosion (Under Mitigated Scenario)

E = 0.85 Mg/hectare/yr (ref : AP-42 S11.9, Table 11.9.4)

Where

E = Emission factor

Assume

For 1-hour an 24-hour Emission:

Mitigated (Non-working Hours)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%)	0.00%	no mitigation measure during non-working hours
E (g/sqm/day)	0.232876712	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000026953	calculated, 24-hour emission

Mitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%)	91.70%	Mitigated
E (g/sqm/day)	0.019328767	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.000002237	calculated, 24-hour emission

Project: 227724 Development of Anderson Road Quarry - Investigation
Calculation of Emission factor of TSP for Material Handling at Stockpile
 According to Section 13.2.4 of AP-42

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

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 from 2007 to 2011 (i.e. ~3.344m/s) , Hong Kong Observatory (Kwun Tong Weather Monitoring Station)
- M = Material moisture content - 2%

$$E = 0.74 \times (0.0016) \times (3.344/2.2)^{1.3} / (2/2)^{1.4}$$

= 0.00204 kg/megagram

No. of trucks loading/unloading at stockpile =	30 per hour
Average carrying capacity for each truck =	15 tonne
Quantity of excavated materials loading at barging point =	450 megagram per hour
Mitigation efficiency (%) =	50.00% watering once per hour

$$\begin{aligned} \text{Emission Rate} &= 0.00204 \times 450 \times (1 - 0.5) \\ &= 0.45912 \text{ kg/hour} \\ &= \mathbf{0.12753 \text{ g/s}} \end{aligned}$$

Mitigated (Day Time)

For Stockpile Area

Emission Rate =	0.12753 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.000008145 g/sq.m/s

Unmitigated (Day Time)

For Stockpile Area

Emission Rate =	0.25507 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.000016291 g/sq.m/s

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of RSP for Heavy Construction (Under Unmitigated Scenario)

E =	0.57	tons/acre/month of activity	Multiplied by a conversion factor of TSP to RSP using particle size multiplier ratio, k (i.e. 0.35/0.74) as defined according to Table 2 of S13.2.4
or =	1.27	Mg/hectare/month of activity	

Where
 E = Emission factor

Assume
 For Annual Emission:

<u>Unmitigated (Day Time)</u>		
Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%):	0.00%	unmitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	0.4893	assume 26 working days per month
E (g/sq.m/s):	0.00011327	calculated, 12 working hours per day

For 1-hour an 24-hour Emission:

<u>Unmitigated (Day Time)</u>		
Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%):	0.00%	unmitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	4.8935	assume 26 working days per month
E (g/sq.m/s):	0.000113274	calculated, 12 working hours per day

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of RSP for Wind Erosion (Under Unmitigated Scenario)

E = 0.40 Mg/hectare/yr Multiplied by a conversion factor of TSP to RSP using particle size multiplier ratio, k (i.e. 0.35/0.74) as defined according to Table 2 of S13.2.4

Where
 E = Emission factor

Assume
 For Annual Emission:

Unmitigated (Non-working Hours)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%)	0.00%	unmitigated
E (g/sqm/day)	0.011014439	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000001275	calculated, 24-hour emission

Unmitigated (Day Time)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%)	0.00%	unmitigated
E (g/sqm/day)	0.011014439	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000001275	calculated, 24-hour emission

For 1-hour an 24-hour Emission:

Unmitigated (Non-working Hours)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%)	0.00%	no mitigation measure during non-working hours
E (g/sqm/day)	0.110144391	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000012748	calculated, 24-hour emission

Unmitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%)	0.00%	unmitigated
E (g/sqm/day)	0.110144391	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000012748	calculated, 24-hour emission

Project: 227724 Development of Anderson Road Quarry - Investigation
Calculation of Emission factor of RSP for Material Handling at Stockpile

According to Section 13.2.4 of AP-42

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

where

- E = Emission Factor in kg/megagram (Ref. AP42 S13.2.4)
- k = Particle size multiplier, k = 0.35 as defined according to Table 2 of S13.2.4
- U = Average wind speed from 2007 to 2011 (i.e. ~3.344m/s) , Hong Kong Observatory (Kwun Tong Weather Monitoring Station)
- M = Material moisture content - 2%

$$E = 0.35 \times (0.0016) \times (3.344/2.2)^{1.3} / (2/2)^{1.4}$$

= 0.00097 kg/megagram

No. of trucks loading/unloading at stockpile =	30 per hour
Average carrying capacity for each truck =	15 tonne
Quantity of excavated materials loading at barging point =	450 megagram per hour
Mitigation efficiency (%) =	50.00% watering once per hour

$$\begin{aligned} \text{Emission Rate} &= 0.00097 \times 450 \times (1 - 0.5) \\ &= 0.21715 \text{ kg/hour} \\ &= \mathbf{0.06032 \text{ g/s}} \end{aligned}$$

Mitigated (Day Time)

For Stockpile Area

Emission Rate =	0.06032 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.000003853 g/sq.m/s

Unmitigated (Day Time)

For Stockpile Area

Emission Rate =	0.12064 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.000007705 g/sq.m/s

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of RSP for Heavy Construction (Under Mitigated Scenario)

E =	0.57	tons/acre/month of activity	Multiplied by a conversion factor of TSP to RSP using particle size multiplier ratio, k (i.e. 0.35/0.74) as defined according to Table 2 of S13.2.4
or =	1.27	Mg/hectare/month of activity	

Where

E = Emission factor

Assume

For Annual Emission:

Mitigated (Day Time)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%):	91.70%	Mitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	0.0406	assume 26 working days per month
E (g/sq.m/s):	0.00000940	calculated, 12 working hours per day

For 1-hour an 24-hour Emission:

Mitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%):	91.70%	Mitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	0.4062	assume 26 working days per month
E (g/sq.m/s):	0.000009402	calculated, 12 working hours per day

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of RSP for Wind Erosion (Under Mitigated Scenario)

E = 0.40 Mg/hectare/yr Multiplied by a conversion factor of TSP to RSP using particle size multiplier ratio, k (i.e. 0.35/0.74) as defined according to Table 2 of S13.2.4

Where
 E = Emission factor

Assume
 For Annual Emission:

Mitigated (Non-working Hours)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%)	0.00%	no mitigation measure during non-working hours
E (g/sqm/day)	0.011014439	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000001275	calculated, 24-hour emission

Mitigated (Day Time)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%)	91.70%	Mitigated
E (g/sqm/day)	0.000914198	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.000000106	calculated, 24-hour emission

For 1-hour an 24-hour Emission:

Mitigated (Non-working Hours)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%)	0.00%	no mitigation measure during non-working hours
E (g/sqm/day)	0.110144391	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000012748	calculated, 24-hour emission

Mitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1, Tier 2 and Tier 3 assessment
Mitigation efficiency (%)	91.70%	Mitigated
E (g/sqm/day)	0.009141984	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.000001058	calculated, 24-hour emission

Project: 227724 Development of Anderson Road Quarry - Investigation
Calculation of Emission factor of RSP for Material Handling at Stockpile

According to Section 13.2.4 of AP-42

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

where

- E = Emission Factor in kg/megagram (Ref. AP42 S13.2.4)
- k = Particle size multiplier, k = 0.35 as defined according to Table 2 of S13.2.4
- U = Average wind speed from 2007 to 2011 (i.e. ~3.344m/s) , Hong Kong Observatory (Kwun Tong Weather Monitoring Station)
- M = Material moisture content - 2%

$$E = 0.35 \times (0.0016) \times (3.344/2.2)^{1.3} / (2/2)^{1.4}$$

= 0.00097 kg/megagram

No. of trucks loading/unloading at stockpile =	30 per hour
Average carrying capacity for each truck =	15 tonne
Quantity of excavated materials loading at barging point =	450 megagram per hour
Mitigation efficiency (%) =	50.00% watering once per hour

$$\begin{aligned} \text{Emission Rate} &= 0.00097 \times 450 \times (1 - 0.5) \\ &= 0.21715 \text{ kg/hour} \\ &= \mathbf{0.06032 \text{ g/s}} \end{aligned}$$

Mitigated (Day Time)

For Stockpile Area

Emission Rate =	0.06032 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.000003853 g/sq.m/s

Unmitigated (Day Time)

For Stockpile Area

Emission Rate =	0.12064 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.000007705 g/sq.m/s

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of FSP for Heavy Construction (Under Unmitigated Scenario)

E =	0.09	tons/acre/month of activity	Multiplied by a conversion factor of TSP to FSP using particle size multiplier ratio, k (i.e. 0.053/0.74) as defined according to Table 2 of S13.2.4
or =	0.19	Mg/hectare/month of activity	

Where
 E = Emission factor

Assume
 For Annual Emission:

<u>Unmitigated (Day Time)</u>		
Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%):	0.00%	unmitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	0.0741	assume 26 working days per month
E (g/sq.m/s):	0.000001715	calculated, 12 working hours per day

For 1-hour an 24-hour Emission:

<u>Unmitigated (Day Time)</u>		
Active operating area (%):	100	assumed all works area are in full operation for Tier 1 and Tier 2 assessment
Mitigation efficiency (%):	0.00%	unmitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	0.7410	assume 26 working days per month
E (g/sq.m/s):	0.000017153	calculated, 12 working hours per day

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of FSP for Wind Erosion (Under Unmitigated Scenario)

E = 0.06 Mg/hectare/yr Multiplied by a conversion factor of TSP to FSP using particle size multiplier ratio, k (i.e. 0.35/0.74) as defined according to Table 2 of S13.2.4

Where
 E = Emission factor

Assume
 For Annual Emission:

Unmitigated (Non-working Hours)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%)	0.00%	unmitigated
E (g/sqm/day)	0.001667901	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.000000193	calculated, 24-hour emission

Unmitigated (Day Time)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%)	0.00%	unmitigated
E (g/sqm/day)	0.001667901	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.000000193	calculated, 24-hour emission

For 1-hour an 24-hour Emission:

Unmitigated (Non-working Hours)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1 and Tier 2 assessment
Mitigation efficiency (%)	0.00%	no mitigation measure during non-working hours
E (g/sqm/day)	0.016679008	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000001930	calculated, 24-hour emission

Unmitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1 and Tier 2 assessment
Mitigation efficiency (%)	0.00%	unmitigated
E (g/sqm/day)	0.016679008	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000001930	calculated, 24-hour emission

Project: 227724 Development of Anderson Road Quarry - Investigation
Calculation of Emission factor of FSP for Material Handling at Stockpile
 According to Section 13.2.4 of AP-42

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

where

- E = Emission Factor in kg/megagram (Ref. AP42 S13.2.4)
- k = Particle size multiplier, k = 0.053 as defined according to Table 2 of S13.2.4
- U = Average wind speed from 2007 to 2011 (i.e. ~3.344m/s), Hong Kong Observatory (Kwun Tong Weather Monitoring Station)
- M = Material moisture content - 2%

$$E = 0.053 \times (0.0016) \times (3.344/2.2)^{1.3} / (2/2)^{1.4}$$

= 0.00015 kg/megagram

No. of trucks loading/unloading at stockpile =	30 per hour
Average carrying capacity for each truck =	15 tonne
Quantity of excavated materials loading at barging point =	450 megagram per hour
Mitigation efficiency (%) =	50.00% watering once per hour

$$\begin{aligned} \text{Emission Rate} &= 0.00015 \times 450 \times (1 - 0.5) \\ &= 0.03288 \text{ kg/hour} \\ &= \mathbf{0.00913 \text{ g/s}} \end{aligned}$$

Mitigated (Day Time)

For Stockpile Area

Emission Rate =	0.00913 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.00000583 g/sq.m/s

Unmitigated (Day Time)

For Stockpile Area

Emission Rate =	0.01827 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.00001167 g/sq.m/s

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of FSP for Heavy Construction (Under Mitigated Scenario)

E =	0.09	tons/acre/month of activity	Multiplied by a conversion factor of TSP to FSP using particle size multiplier ratio, k (i.e. 0.053/0.74) as defined according to Table 2 of S13.2.4
or =	0.19	Mg/hectare/month of activity	

Where

E = Emission factor

Assume

For Annual Emission:

Mitigated (Day Time)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%):	91.70%	Mitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	0.0062	assume 26 working days per month
E (g/sq.m/s):	0.00000142	calculated, 12 working hours per day

For 1-hour an 24-hour Emission:

Mitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1 and Tier 2 assessment
Mitigation efficiency (%):	91.70%	Mitigated
Working days per month:	26	days
Working hours per day:	12	hours
E (g/sq.m/day):	0.0615	assume 26 working days per month
E (g/sq.m/s):	0.000001424	calculated, 12 working hours per day

Project: 227724 Development of Anderson Road Quarry - Investigation
Title: Calculation of Emission factor of FSP for Wind Erosion (Under Mitigated Scenario)

E = 0.06 Mg/hectare/yr Multiplied by a conversion factor of TSP to FSP
 using particle size multiplier ratio, k (i.e. 0.053/0.74)
 as defined according to Table 2 of S13.2.4

Where
 E = Emission factor

Assume
 For Annual Emission:

Mitigated (Non-working Hours)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%)	0.00%	no mitigation measure during non-working hours
E (g/sqm/day)	0.001667901	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000000193	calculated, 24-hour emission

Mitigated (Day Time)

Active operating area (%):	10	refer to Appendix 4.8 for Justification
Mitigation efficiency (%)	91.70%	Mitigated
E (g/sqm/day)	0.000138436	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000000016	calculated, 24-hour emission

For 1-hour an 24-hour Emission:

Mitigated (Non-working Hours)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1 and Tier 2 assessment
Mitigation efficiency (%)	0.00%	no mitigation measure during non-working hours
E (g/sqm/day)	0.016679008	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000001930	calculated, 24-hour emission

Mitigated (Day Time)

Active operating area (%):	100	assumed all works area are in full operation for Tier 1 and Tier 2 assessment
Mitigation efficiency (%)	91.70%	Mitigated
E (g/sqm/day)	0.001384358	calculated as in AP-42 (S11.9, Table 11.9.4)
E (g/sq.m/s)	0.0000000160	calculated, 24-hour emission

Project: 227724 Development of Anderson Road Quarry - Investigation
Calculation of Emission factor of FSP for Material Handling at Stockpile
 According to Section 13.2.4 of AP-42

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

where

- E = Emission Factor in kg/megagram (Ref. AP42 S13.2.4)
- k = Particle size multiplier, k = 0.053 as defined according to Table 2 of S13.2.4
- U = Average wind speed from 2007 to 2011 (i.e. ~3.344m/s) , Hong Kong Observatory (Kwun Tong Weather Monitoring Station)
- M = Material moisture content - 2%

$$E = 0.053 \times (0.0016) \times (3.344/2.2)^{1.3} / (2/2)^{1.4}$$

= 0.00015 kg/megagram

No. of trucks loading/unloading at stockpile =	30 per hour
Average carrying capacity for each truck =	15 tonne
Quantity of excavated materials loading at barging point =	450 megagram per hour
Mitigation efficiency (%) =	50.00% watering once per hour

$$\begin{aligned} \text{Emission Rate} &= 0.00015 \times 450 \times (1 - 0.5) \\ &= 0.03288 \text{ kg/hour} \\ &= \mathbf{0.00913 \text{ g/s}} \end{aligned}$$

Mitigated (Day Time)

For Stockpile Area

Emission Rate =	0.00913 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.00000583 g/sq.m/s

Unmitigated (Day Time)

For Stockpile Area

Emission Rate =	0.01827 g/s
Total Area for Stockpile =	15657.28 sq. m
Emission Rate per unit area =	0.00001167 g/sq.m/s

Moisture Content of Soil Samples in Study Area

Drillhole	Depth (m)	Sampling Date	Moisture Content (%)
VBH7	0.00 - 0.70	22/10/2013	13
VBH7	0.70 - 1.50	22/10/2013	13
VBH8	0.00 - 1.50	22/10/2013	16
		Average	14

The average soil moisture content of the Project site is 14%. 2% moisture content is adopted for estimating the dust emission factor for aggregate handling as a conservative approach.

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00001629		0.00000270	0.00000270	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	26.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00023949				0.00000270	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-52	Area	842556	820112	80.3	29.9	0	-64.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00023949				0.00000270	0.00000270	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00023949				0.00000270	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-3	Area	841064	821453.1	47.4	56.4	0	-22.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00023949				0.00000270	0.00000270	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00023949				0.00000270	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000815			0.0000022	0.0000022	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	-25.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00001988					0.0000022	0.00000270	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00001988					0.0000022	0.00000270	
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00001988					0.0000022	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-52	Area	842566	820112	80.3	29.9	0	-64.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00001988				0.00000022	0.00000270	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00001988				0.00000022	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00001988				0.0000022	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T2 mitigated (For DAR Site C)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000815		0.0000022	0.0000022	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	-28.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-1	Area	841867	820805	56.3	107.2	0	-90.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-2	Area	841936	820676	23.6	201.4	0	19.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-3	Area	842062	820483	10.7	254.5	0	40.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-4	Area	842154	820485	79.4	127.2	0	-52.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-5	Area	842238	820517	28.9	41.0	0	-52.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-6	Area	842255	820490	15.3	294.6	0	-52.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-7	Area	842325	820461	100.7	58.2	0	-52.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-8	Area	842266	820459	34.9	36.6	0	-52.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-9	Area	842371	820404	45.5	45.9	0	-52.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-10	Area	842067	820424	40.2	199.8	0	39.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-11	Area	842045	820366	59.7	32.8	0	39.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC03_PH1-12	Area	841982	820541	18.5	81.3	0	23.0	0.00001988				0.0000022	0.00000270	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00001988				0.0000022	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T2 mitigated (For DAR Site C)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00001988				0.00000022	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T2 mitigated (For DAR Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000815					
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00001988							
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00001988							
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00001988							
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00001988							
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00001988							
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00001988							
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00001988							
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00001988							
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00001988							
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00001988							
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00001988							
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00001988							
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00001988							
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00001988							
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00001988							
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	-28.0	0.00001988							
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00001988							
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00001988							
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00001988							
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00001988							
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00001988							
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00001988							
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00001988							
The ARQ Project	WC03_PH1-1	Area	842447	820445	19.6	89.2	0	15.0	0.00001988							
The ARQ Project	WC03_PH1-2	Area	842470	820367	21.5	70.2	0	24.0	0.00001988							
The ARQ Project	WC03_PH1-3	Area	842522	820303	18.1	91.0	0	44.0	0.00001988							
The ARQ Project	WC03_PH1-4	Area	842572	820223	15.4	95.8	0	22.0	0.00001988							
The ARQ Project	WC03_PH1-5	Area	842608	820136	14.8	91.4	0	22.0	0.00001988							
The ARQ Project	WC03_PH1-6	Area	842639	820079	15.4	35.9	0	46.0	0.00001988							
The ARQ Project	WC03_PH1-7	Area	842329	820457	89.4	59.1	0	-52.0	0.00001988							
The ARQ Project	WC03_PH1-8	Area	842389	820418	45.5	91.8	0	-52.0	0.00001988							
The ARQ Project	WC03_PH1-9	Area	842415	820393	27.7	61.5	0	-52.0	0.00001988							
The ARQ Project	WC03_PH1-10	Area	842484	820289	72.9	49.1	0	-45.0	0.00001988							
The ARQ Project	WC03_PH1-11	Area	842529	820260	29.7	28.2	0	-45.0	0.00001988							
The ARQ Project	WC03_PH1-12	Area	842445	820013	31.5	45.2	0	-52.0	0.00001988							
The ARQ Project	WC03_PH1-13	Area	842584	820123	110.2	29.9	0	-64.0	0.00001988							
The ARQ Project	WC03_PH1-14	Area	842621	820069	17.8	20.4	0	-61.0	0.00001988							
The ARQ Project	WC03_PH1-15	Area	842508	820381	71.2	25.8	0	-33.0	0.00001988							
The ARQ Project	WC03_PH1-16	Area	842566	820112	80.3	29.9	0	-64.0	0.00001988							
The ARQ Project	WC03_PH1-17	Area	842528	820096	60.4	29.9	0	-64.0	0.00001988							
The ARQ Project	WC03_PH1-18	Area	842503	820077	40.4	29.9	0	-64.0	0.00001988							
The ARQ Project	WC03_PH1-19	Area	842483	820034	73.4	38.6	0	-64.0	0.00001988							
The ARQ Project	WC03_PH1-20	Area	842509	820353	38.6	19.6	0	-33.0	0.00001988							
The ARQ Project	WC03_PH1-21	Area	842594	820309	25.7	95.7	0	-54.0	0.00001988							
The ARQ Project	WC03_PH1-22	Area	842568	820215	74.9	11.4	0	-64.0	0.00001988							
The ARQ Project	WC03_PH1-23	Area	842606	820241	86.7	59.1	0	-65.0	0.00001988							
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00001988							
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00001988							
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00001988							
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00001988							
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00001988							
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00001988							
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00001988							
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00001988							
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00001988							
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00001988							
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00001988							
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00001988							
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00001988							
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00001988							
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00001988							

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T2 mitigated (For DAR Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00001988				0.0000022	0.00000270	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00001988				0.0000022	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T2 mitigated (For Ma Yau Tong Village)

Project Type	Source ID	Source Type	Coordinates of centroid				Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2	Heavy Construction				Stockpiling		Wind Erosion				
			(m)	(m)	(m)	(m)	Daytime	Non-working Hours			Daytime	Non-working Hours	Daytime	Non-working Hours			
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000815			0.0000022	0.0000022		
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	-25.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-1	Area	842828	820090	13.7	53.5	0	-52.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-2	Area	842857	820121	13.1	27.8	0	-32.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-3	Area	842873	820165	13.8	62.3	0	-15.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-4	Area	842892	820208	15.5	27.2	0	-46.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-5	Area	842923	820225	20.6	30.9	0	-90.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-6	Area	842954	820219	20.4	25.3	0	63.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-7	Area	842980	820203	20.4	33.6	0	55.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-8	Area	842979	820182	6.2	15.8	0	5.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-9	Area	842956	820124	13.0	134.9	0	-34.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-10	Area	843008	820194	12.0	35.1	0	-51.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-11	Area	843040	820214	12.6	37.2	0	-65.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-12	Area	843072	820225	12.4	29.3	0	-78.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-13	Area	842874	820110	26.3	55.9	0	-30.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-14	Area	842916	820171	31.0	87.2	0	-40.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-15	Area	842929	820284	112.9	60.7	0	-33.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-16	Area	843003	820246	51.8	76.2	0	-33.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-17	Area	843053	820250	26.9	31.6	0	-33.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-18	Area	842863	820234	57.7	95.3	0	-33.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-19	Area	842959	820179	25.1	23.1	0	-40.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC03_PH1-20	Area	842959	820147	9.0	60.8	0	-34.0	0.00001988					0.0000022	0.00000270		
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00001988					0.0000022	0.00000270		
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00001988					0.0000022	0.00000270		

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T2 mitigated (For Ma Yau Tong Village)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00001988				0.00000022	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T3 mitigated (For DAR Site C)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks		
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion				
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours			
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0									
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	-28.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-1	Area	841866	820784	14.1	106.3	2.5	-90.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-2	Area	841930	820674	11.8	201.4	2.5	19.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-3	Area	842062	820483	10.7	254.5	20	40.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-4	Area	842154	820485	79.4	127.2	20	-52.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-5	Area	842238	820517	28.9	42.0	20	-52.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-6	Area	842255	820490	15.3	294.6	20	-52.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-7	Area	842325	820461	100.7	58.2	20	-52.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-8	Area	842266	820459	34.9	36.6	20	-52.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-9	Area	842371	820404	45.5	45.9	20	-52.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-10	Area	842045	820366	59.7	32.8	0	39.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-11	Area	842078	820433	10.0	199.8	17.5	39.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-12	Area	842071	820427	10.0	199.8	12.5	39.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-13	Area	842063	820421	10.0	199.8	7.5	39.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-14	Area	842055	820414	10.0	199.8	2.5	39.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-15	Area	841986	820543	9.4	81.3	5	23.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-16	Area	841978	820539	9.2	81.3	2.5	23.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-17	Area	841941	820678	11.8	201.4	10	19.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC03_PH1-18	Area	841866	820812	42.3	106.3	10	-90.0	0.00001988					0.00000222	0.00000270		
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.0	0	-8.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00001988					0.00000222	0.00000270		
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00001988					0.00000222	0.00000270		

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 1-hr TSP concentration calculation - 2017, T3 mitigated (For DAR Site C)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00001988				0.00000022	0.00000270	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00001988				0.00000022	0.00000270	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks			
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion					
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours				
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0										
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00011327					0.00000127	0.00000127			
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00011327					0.00000127	0.00000127			
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00011327					0.00000127	0.00000127			

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-52	Area	842556	820112	80.3	29.9	0	-64.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00001327				0.00000127	0.00000127	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00001327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00001327				0.00000127	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00011327				0.00000127	0.00000127	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00011327				0.00000127	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual RSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000771			0.00000013	0.00000013	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00001133					0.00000013	0.00000013	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual RSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-52	Area	842556	820112	80.3	29.9	0	-64.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00001133					0.00000013	0.00000013	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00001133					0.00000013	0.00000013	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual RSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00001133					0.00000013	0.00000013	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00001133					0.00000013	0.00000013	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks		
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion				
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours			
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000385				0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000940						0.0000011	0.0000127	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00000940						0.0000011	0.0000127	
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00000940						0.0000011	0.0000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-52	Area	842566	820112	80.3	29.9	0	-64.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000940				0.00000011	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000940				0.00000011	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual RSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks		
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion				
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours			
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0									
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000094			0.00000385		0.00000001	0.00000013		
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000094					0.00000001	0.00000013		
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00000094					0.00000001	0.00000013		
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00000094					0.00000001	0.00000013		

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual RSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-52	Area	842566	820112	80.3	29.9	0	-64.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00000094				0.00000001	0.00000013	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000094				0.00000001	0.00000013	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual RSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000094				0.00000001	0.00000013	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000094				0.00000001	0.00000013	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T2 mitigated (For DAR Site C and Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000385		0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-1	Area	841867	820805	56.3	107.2	0	-90.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-2	Area	841936	820676	23.6	201.4	0	19.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-3	Area	842062	820483	10.7	254.5	0	40.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-4	Area	842154	820485	79.4	127.2	0	-52.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-5	Area	842238	820517	28.9	41.0	0	-52.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-6	Area	842255	820490	15.3	294.6	0	-52.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-7	Area	842325	820461	100.7	58.2	0	-52.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-8	Area	842266	820459	34.9	36.6	0	-52.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-9	Area	842371	820404	45.5	45.9	0	-52.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-10	Area	842067	820424	40.2	199.8	0	39.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-11	Area	842045	820366	59.7	32.8	0	39.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC03_PH1-12	Area	841982	820541	18.5	81.3	0	23.0	0.00000940				0.00000011	0.00000127	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000940				0.00000011	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T2 mitigated (For DAR Site C and Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000940				0.00000011	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T2 mitigated (For DAR Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000385		0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	24.9	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-1	Area	842447	820445	19.6	89.2	0	15.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-2	Area	842470	820367	21.5	70.2	0	24.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-3	Area	842522	820303	18.1	91.0	0	44.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-4	Area	842572	820223	15.4	95.8	0	22.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-5	Area	842608	820136	14.8	91.4	0	22.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-6	Area	842639	820079	15.4	35.9	0	46.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-7	Area	842329	820457	89.4	59.1	0	-52.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-8	Area	842389	820418	45.5	91.8	0	-52.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-9	Area	842415	820393	27.7	61.5	0	-52.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-10	Area	842484	820289	72.9	49.1	0	-45.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-11	Area	842529	820260	29.7	28.2	0	-45.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-12	Area	842445	820013	31.5	45.2	0	-52.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-13	Area	842584	820123	110.2	29.9	0	-64.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-14	Area	842621	820069	17.8	20.4	0	-61.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-15	Area	842508	820381	71.2	25.8	0	-33.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-16	Area	842556	820112	80.3	29.9	0	-64.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-17	Area	842528	820096	60.4	29.9	0	-64.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-18	Area	842503	820077	40.4	29.9	0	-64.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-19	Area	842483	820034	73.4	38.6	0	-64.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-20	Area	842509	820353	38.6	19.6	0	-33.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-21	Area	842594	820309	25.7	95.7	0	-54.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-22	Area	842558	820215	74.9	11.4	0	-64.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC03_PH1-23	Area	842606	820241	86.7	59.1	0	-65.0	0.00000940				0.0000011	0.0000127	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000940				0.0000011	0.0000127	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000940				0.0000011	0.0000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T2 mitigated (For DAR Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000940				0.00000011	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T3 mitigated (For DAR Site C)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000385			0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-1	Area	841866	820784	14.1	106.3	2.5	-90.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-2	Area	841930	820674	11.8	201.4	2.5	19.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-3	Area	842062	820483	10.7	254.5	20	40.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-4	Area	842154	820485	79.4	127.2	20	-52.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-5	Area	842238	820517	28.9	42.0	20	-52.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-6	Area	842255	820490	15.3	294.6	20	-52.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-7	Area	842325	820461	100.7	58.2	20	-52.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-8	Area	842266	820459	34.9	36.6	20	-52.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-9	Area	842371	820404	45.5	45.9	20	-52.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-10	Area	842045	820366	59.7	32.8	0	39.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-11	Area	842078	820433	10.0	199.8	17.5	39.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-12	Area	842071	820427	10.0	199.8	12.5	39.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-13	Area	842063	820421	10.0	199.8	7.5	39.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-14	Area	842055	820414	10.0	199.8	2.5	39.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-15	Area	841986	820543	9.4	81.3	5	23.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-16	Area	841978	820539	9.2	81.3	2.5	23.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-17	Area	841941	820678	11.8	201.4	10	19.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC03_PH1-18	Area	841866	820812	42.3	106.3	10	-90.0	0.00000940					0.00000011	0.00000127	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.0	0	-8.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000940					0.00000011	0.00000127	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000940					0.00000011	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr RSP concentration calculation - 2017, T3 mitigated (For DAR Site C)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000940				0.00000011	0.00000127	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000940				0.00000011	0.00000127	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000117		0.00000019	0.00000019	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00001715				0.00000019	0.00000019	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-52	Area	842556	820112	80.3	29.9	0	-64.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00001715				0.00000019	0.00000019	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00001715				0.00000019	0.00000019	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00001715				0.00000019	0.00000019	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00001715				0.00000019	0.00000019	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual FSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000117					
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00000172					0.00000002	0.00000002	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual FSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-52	Area	842556	820112	80.3	29.9	0	-64.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00000172					0.00000002	0.00000002	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000172					0.00000002	0.00000002	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual FSP concentration calculation - 2017, Unmitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks	
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion			
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours		
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000172					0.00000002	0.00000002	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000172					0.00000002	0.00000002	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000058		0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00000142				0.00000002	0.00000019	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-52	Area	842566	820112	80.3	29.9	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000142				0.00000002	0.00000019	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000142				0.00000002	0.00000019	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual FSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000058		0.00000000	0.00000002	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	26.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-1	Area	841867	820805	57.0	107.2	0	-90.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-2	Area	841935	820675	28.5	193.7	0	19.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-3	Area	842069	820469	20.4	229.0	0	40.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-4	Area	842041	820444	33.8	97.4	0	40.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-5	Area	841998	820501	30.7	40.7	0	30.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-6	Area	842043	820365	37.9	60.6	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-7	Area	842155	820485	79.4	128.8	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-8	Area	842238	820517	28.9	41.7	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-9	Area	842221	820568	72.0	77.0	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-10	Area	842255	820489	26.9	294.6	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-11	Area	842405	820529	24.8	93.6	0	40.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-12	Area	842447	820445	19.6	89.2	0	15.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-13	Area	842470	820367	21.5	70.2	0	24.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-14	Area	842522	820303	18.1	91.0	0	44.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-15	Area	842572	820223	15.4	95.8	0	22.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-16	Area	842608	820136	14.8	91.4	0	22.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-17	Area	842639	820079	15.4	35.9	0	46.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-18	Area	842670	820060	14.0	30.3	0	71.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-19	Area	842715	820054	14.7	58.0	0	89.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-20	Area	842776	820063	13.9	61.3	0	-72.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-21	Area	842828	820090	13.7	53.5	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-22	Area	842857	820121	13.1	27.8	0	-32.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-23	Area	842873	820165	13.8	62.3	0	-15.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-24	Area	842892	820208	15.5	27.2	0	-46.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-25	Area	842923	820225	20.6	30.9	0	-90.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-26	Area	842954	820219	20.4	25.3	0	63.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-27	Area	842980	820203	20.4	33.6	0	55.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-28	Area	842979	820182	6.2	15.8	0	5.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-29	Area	842957	820123	15.3	134.9	0	-34.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-30	Area	843009	820193	16.3	33.8	0	-51.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-31	Area	843039	820213	17.1	36.9	0	-65.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-32	Area	843072	820225	16.2	29.9	0	-78.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-33	Area	842348	820479	100.7	118.2	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-34	Area	842266	820459	34.9	36.6	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-35	Area	842389	820418	45.5	91.8	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-36	Area	842415	820393	27.7	61.5	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-37	Area	842484	820289	72.9	49.1	0	-45.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-38	Area	842529	820260	29.7	28.2	0	-45.0	0.00000142				0.00000000	0.00000002	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual FSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	WC03_PH1-39	Area	842445	820013	31.5	45.2	0	-52.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-40	Area	842584	820123	110.2	29.9	0	-64.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-41	Area	842621	820069	17.8	20.4	0	-61.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-42	Area	842590	820529	99.2	309.2	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-43	Area	842688	820487	107.5	216.8	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-44	Area	842874	820110	26.3	55.9	0	-30.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-45	Area	842916	820171	31.0	87.2	0	-40.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-46	Area	842568	820360	46.0	119.0	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-47	Area	842508	820381	71.2	25.8	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-48	Area	842779	820415	122.9	195.3	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-49	Area	842932	820289	112.9	72.2	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-50	Area	843004	820248	51.8	80.1	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-51	Area	843054	820252	26.8	36.6	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-52	Area	842566	820112	80.3	29.9	0	-64.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-53	Area	842528	820096	60.4	29.9	0	-64.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-54	Area	842503	820077	40.4	29.9	0	-64.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-55	Area	842483	820034	73.4	38.6	0	-64.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-56	Area	842459	820578	120.1	123.9	0	40.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-57	Area	842509	820353	38.6	19.6	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-58	Area	842594	820309	25.7	95.7	0	-54.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-59	Area	842783	820238	79.3	320.6	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-60	Area	842863	820234	57.7	95.3	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-61	Area	842808	820145	64.4	112.4	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-62	Area	842749	820088	26.9	47.0	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-63	Area	842959	820179	25.1	23.1	0	-40.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-64	Area	842959	820147	9.0	60.8	0	-34.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-65	Area	842558	820215	74.9	11.4	0	-64.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-66	Area	842483	820487	61.9	31.5	0	59.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-67	Area	842645	820165	69.8	47.0	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-68	Area	842674	820098	89.2	32.3	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-69	Area	842632	820369	44.2	33.9	0	-33.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-70	Area	842606	820241	86.7	59.1	0	-65.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-71	Area	842738	820294	57.3	50.8	0	-34.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-72	Area	842680	820195	45.6	40.2	0	-34.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-73	Area	842099	820373	33.8	85.9	0	40.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC03_PH1-74	Area	841975	820551	24.8	64.7	0	18.0	0.00000142				0.00000000	0.00000002	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000142				0.00000000	0.00000002	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ Annual FSP concentration calculation - 2017, T1 mitigated

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000142				0.00000000	0.00000002	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000142				0.00000000	0.00000002	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, T2 mitigated (For DAR Site C and Site E)

Project Type	Source ID	Source Type	Coordinates of centroid				Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2	Heavy Construction				Stockpiling		Wind Erosion				
			(m)	(m)	(m)	(m)	Daytime	Non-working Hours			Daytime	Non-working Hours	Daytime	Non-working Hours			
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000058		0.00000002	0.00000019			
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	-28.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-1	Area	841867	820805	56.3	107.2	0	-90.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-2	Area	841936	820676	23.6	201.4	0	19.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-3	Area	842062	820483	10.7	254.5	0	40.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-4	Area	842154	820485	79.4	127.2	0	-52.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-5	Area	842238	820517	28.9	41.0	0	-52.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-6	Area	842255	820490	15.3	294.6	0	-52.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-7	Area	842325	820461	100.7	58.2	0	-52.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-8	Area	842266	820459	34.9	36.6	0	-52.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-9	Area	842371	820404	45.5	45.9	0	-52.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-10	Area	842067	820424	40.2	199.8	0	39.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-11	Area	842045	820366	59.7	32.8	0	39.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC03_PH1-12	Area	841982	820541	18.5	81.3	0	23.0	0.00000142				0.00000002	0.00000019			
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000142				0.00000002	0.00000019			
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000142				0.00000002	0.00000019			

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, T2 mitigated (For DAR Site C and Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000142				0.00000002	0.00000019	

Location and Details of Worksites for Fugitive Dust Assessment

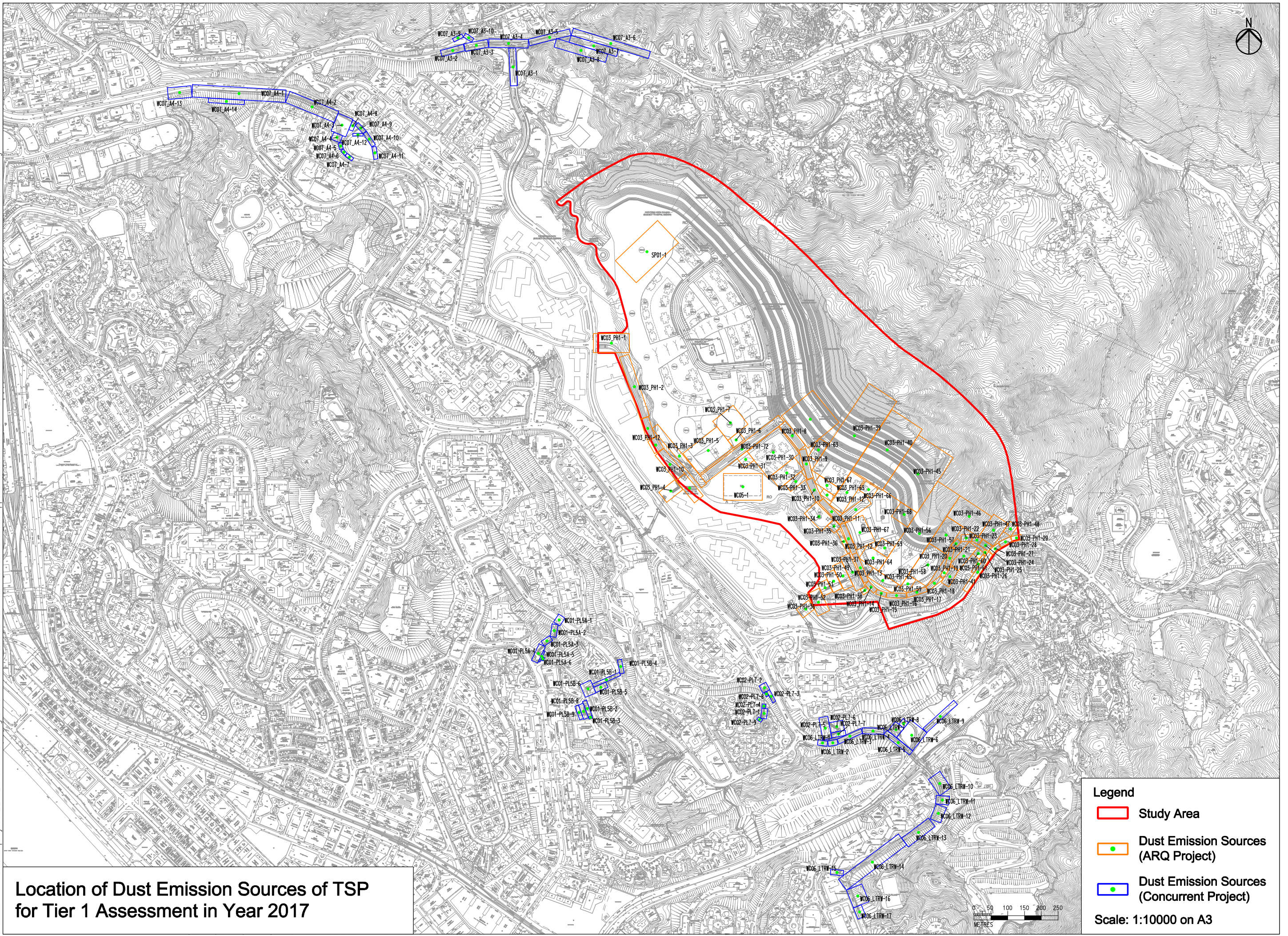
ARQ 24-hr FSP concentration calculation - 2017, T2 mitigated (For DAR Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height (m)	Angle / Width (deg / m)	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
The ARQ Project	SP01-1	Area	841972	821077	90.4	173.2	0	-47.0			0.00000058		0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-1	Area	841711	819981	22.2	27.8	0	-33.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-2	Area	841696	819949	17.7	38.1	0	-9.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-3	Area	841674	819919	17.4	30.2	0	-56.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-4	Area	841649	819881	20.3	54.2	0	-25.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-5	Area	841659	819873	4.8	35.0	0	-25.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5A-6	Area	841662	819865	7.5	10.4	0	-25.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-1	Area	841852	819803	9.8	87.8	0	-67.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-2	Area	841795	819717	49.0	12.5	0	-70.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-3	Area	841804	819691	6.8	11.4	0	-70.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-4	Area	841894	819842	42.2	12.5	0	-79.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-5	Area	841835	819781	17.5	39.4	0	-67.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-6	Area	841797	819776	40.5	34.1	0	-67.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-7	Area	841783	819709	45.7	14.8	0	-70.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC01_PL5B-8	Area	841770	819706	42.9	11.6	0	-70.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-1	Area	842321	819703	17.5	30.5	0	-8.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-2	Area	842322	819779	22.6	24.9	0	28.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-3	Area	842342	819754	10.4	38.9	0	28.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-4	Area	842320	819725	11.0	12.2	0	-6.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-5	Area	842503	819659	27.0	67.0	0	11.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-6	Area	842542	819642	43.1	15.2	0	11.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-7	Area	842537	819664	41.4	30.3	0	11.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-8	Area	842328	819761	7.6	13.7	0	28.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC02_PL7-9	Area	842308	819685	14.3	9.8	0	-37.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-1	Area	842447	820445	19.6	89.2	0	15.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-2	Area	842470	820367	21.5	70.2	0	24.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-3	Area	842522	820303	18.1	91.0	0	44.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-4	Area	842572	820223	15.4	95.8	0	22.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-5	Area	842608	820136	14.8	91.4	0	22.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-6	Area	842639	820079	15.4	35.9	0	46.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-7	Area	842329	820457	89.4	59.1	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-8	Area	842389	820418	45.5	91.8	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-9	Area	842415	820393	27.7	61.5	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-10	Area	842484	820289	72.9	49.1	0	-45.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-11	Area	842529	820260	29.7	28.2	0	-45.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-12	Area	842445	820013	31.5	45.2	0	-52.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-13	Area	842584	820123	110.2	29.9	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-14	Area	842621	820069	17.8	20.4	0	-61.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-15	Area	842508	820381	71.2	25.8	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-16	Area	842556	820112	80.3	29.9	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-17	Area	842528	820096	60.4	29.9	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-18	Area	842503	820077	40.4	29.9	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-19	Area	842483	820034	73.4	38.6	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-20	Area	842509	820353	38.6	19.6	0	-33.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-21	Area	842594	820309	25.7	95.7	0	-54.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-22	Area	842558	820215	74.9	11.4	0	-64.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC03_PH1-23	Area	842606	820241	86.7	59.1	0	-65.0	0.00000142				0.00000002	0.00000019	
The ARQ Project	WC05-1	Area	842258	820377	79.9	116.3	0	-90.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-1	Area	842495	819615	28.5	15.5	0	-8.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-2	Area	842525	819615	16.3	28.3	0	-81.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-3	Area	842576	819635	15.0	77.5	0	-65.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-4	Area	842645	819651	65.1	18.0	0	-1.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-5	Area	842720	819616	98.5	15.1	0	-39.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-6	Area	842761	819638	62.0	68.1	0	-39.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-7	Area	842714	819655	32.4	35.6	0	-39.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-8	Area	842736	819673	19.6	21.4	0	-39.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-9	Area	842845	819694	16.6	124.0	0	-48.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-10	Area	842844	819494	59.0	41.7	0	-55.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-11	Area	842852	819445	39.4	25.3	0	-5.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-12	Area	842840	819405	32.7	47.9	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-13	Area	842781	819349	32.7	99.5	0	-53.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-14	Area	842643	819261	40.7	224.0	0	-53.0	0.00000142				0.00000002	0.00000019	

Location and Details of Worksites for Fugitive Dust Assessment

ARQ 24-hr FSP concentration calculation - 2017, T2 mitigated (For DAR Site E)

Project Type	Source ID	Source Type	Coordinates of centroid		Dimension (m)		Height	Angle / Width	Emission Rate (g/s/sq.m)						Remarks
			X1	Y1	X2	Y2			Heavy Construction		Stockpiling		Wind Erosion		
			(m)	(m)	(m)	(m)			Daytime	Non-working Hours	Daytime	Non-working Hours	Daytime	Non-working Hours	
Concurrent Project	WC06_LTRW-15	Area	842538	819230	16.2	38.2	0	85.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-16	Area	842600	819160	49.6	56.7	0	22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC06_LTRW-17	Area	842605	819112	25.1	35.8	0	22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-1	Area	841574	821626	112.2	20.7	0	-87.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-2	Area	841394	821675	19.2	70.8	0	-75.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-3	Area	841465	821690	23.2	70.8	0	-79.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-4	Area	841560	821696	117.3	25.2	0	-1.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-5	Area	841683	821714	19.7	126.2	0	-76.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-6	Area	841865	821696	239.6	21.8	0	-17.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-7	Area	841814	821689	147.5	21.8	0	-17.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-8	Area	841776	821675	160.0	26.5	0	-17.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-9	Area	841410	821712	11.3	30.6	0	-63.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A3-10	Area	841441	821713	29.3	12.8	0	-32.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-1	Area	840758	821547	278.7	37.0	0	-3.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-2	Area	840975	821507	157.5	35.5	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-3	Area	841064	821453	47.4	56.4	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-4	Area	841049	821417	28.3	22.7	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-5	Area	841060	821391	19.0	11.3	0	-77.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-6	Area	841070	821372	17.9	9.8	0	-48.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-7	Area	841086	821358	24.0	10.3	0	-36.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-8	Area	841096	821451	12.7	29.6	0	-22.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-9	Area	841120	821444	34.4	12.7	0	-46.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-10	Area	841146	821411	47.0	12.7	0	-57.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-11	Area	841162	821371	37.3	12.7	0	-81.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-12	Area	841112	821424	30.3	8.1	0	1.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-13	Area	840581	821550	34.5	70.9	0	-85.0	0.00000142				0.00000002	0.00000019	
Concurrent Project	WC07_A4-14	Area	840720	821524	107.6	12.9	0	-3.0	0.00000142				0.00000002	0.00000019	

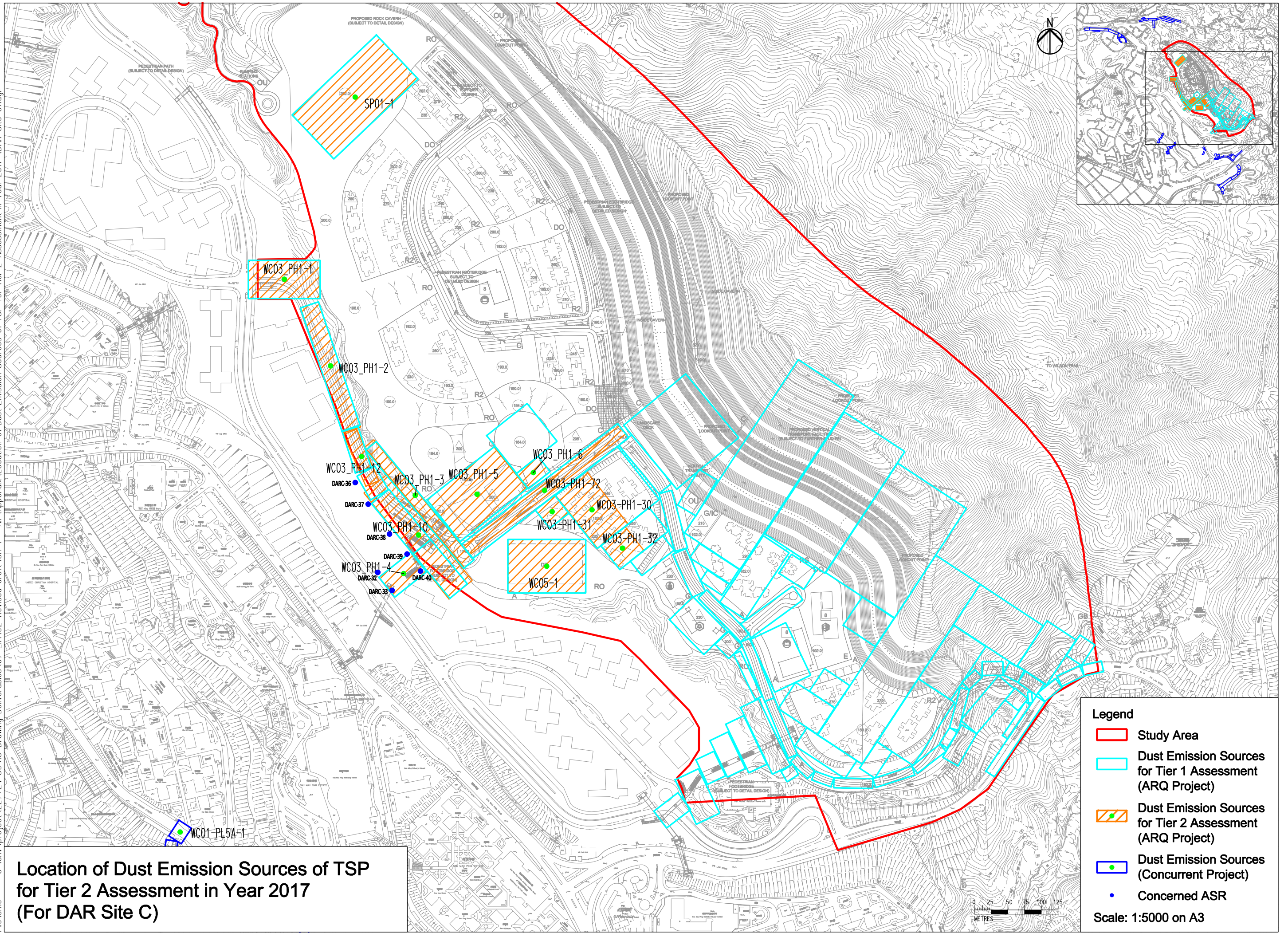


Location of Dust Emission Sources of TSP for Tier 1 Assessment in Year 2017

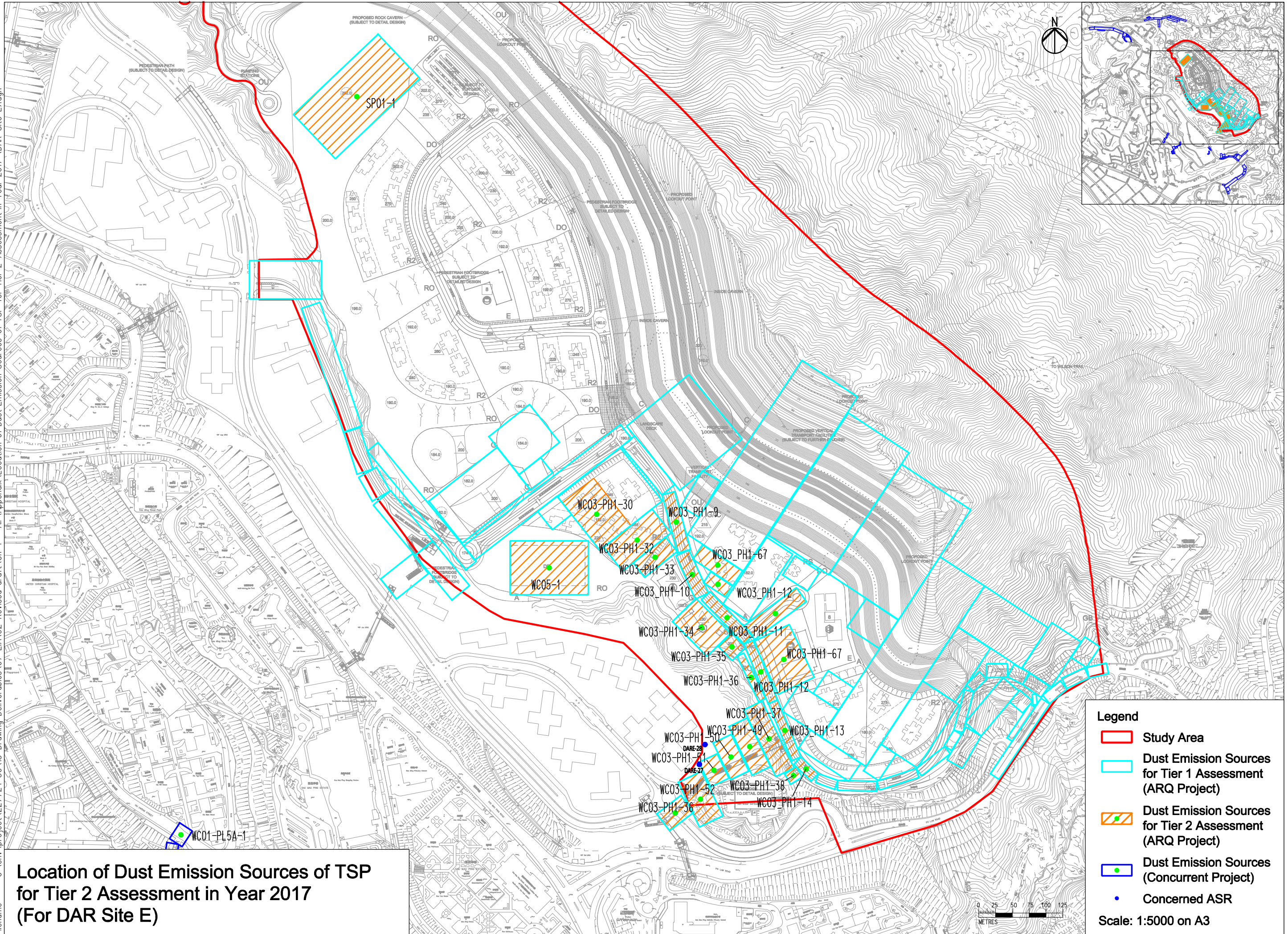
Legend

- Study Area
- Dust Emission Sources (ARQ Project)
- Dust Emission Sources (Concurrent Project)

Scale: 1:10000 on A3



Location of Dust Emission Sources of TSP for Tier 2 Assessment in Year 2017 (For DAR Site C)








Location of Dust Emission Sources of TSP for Tier 2 Assessment in Year 2017 (For DAR Site E)

Legend

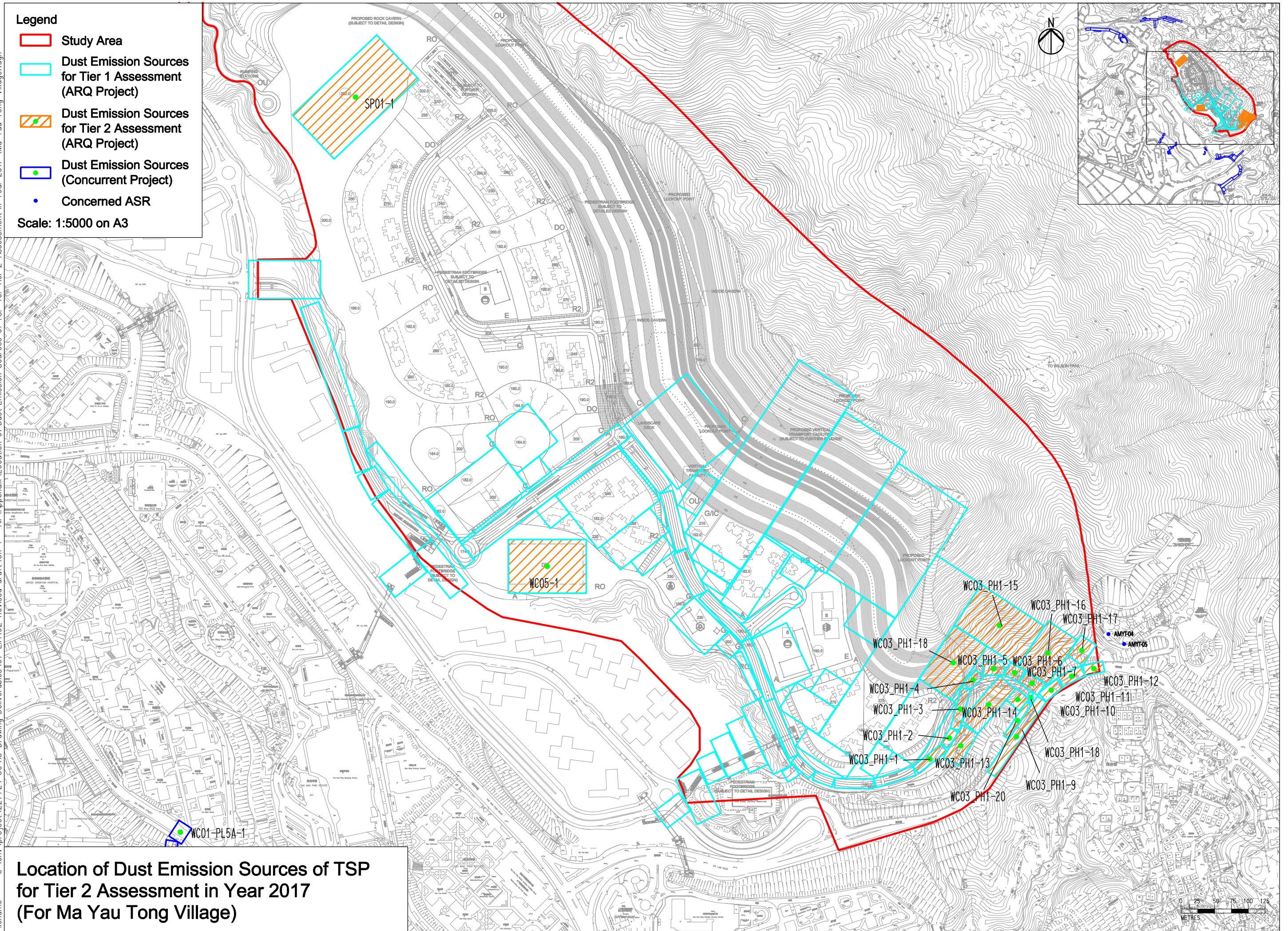
- Study Area
- Dust Emission Sources for Tier 1 Assessment (ARQ Project)
- Dust Emission Sources for Tier 2 Assessment (ARQ Project)
- Dust Emission Sources (Concurrent Project)
- Concerned ASR

Scale: 1:5000 on A3

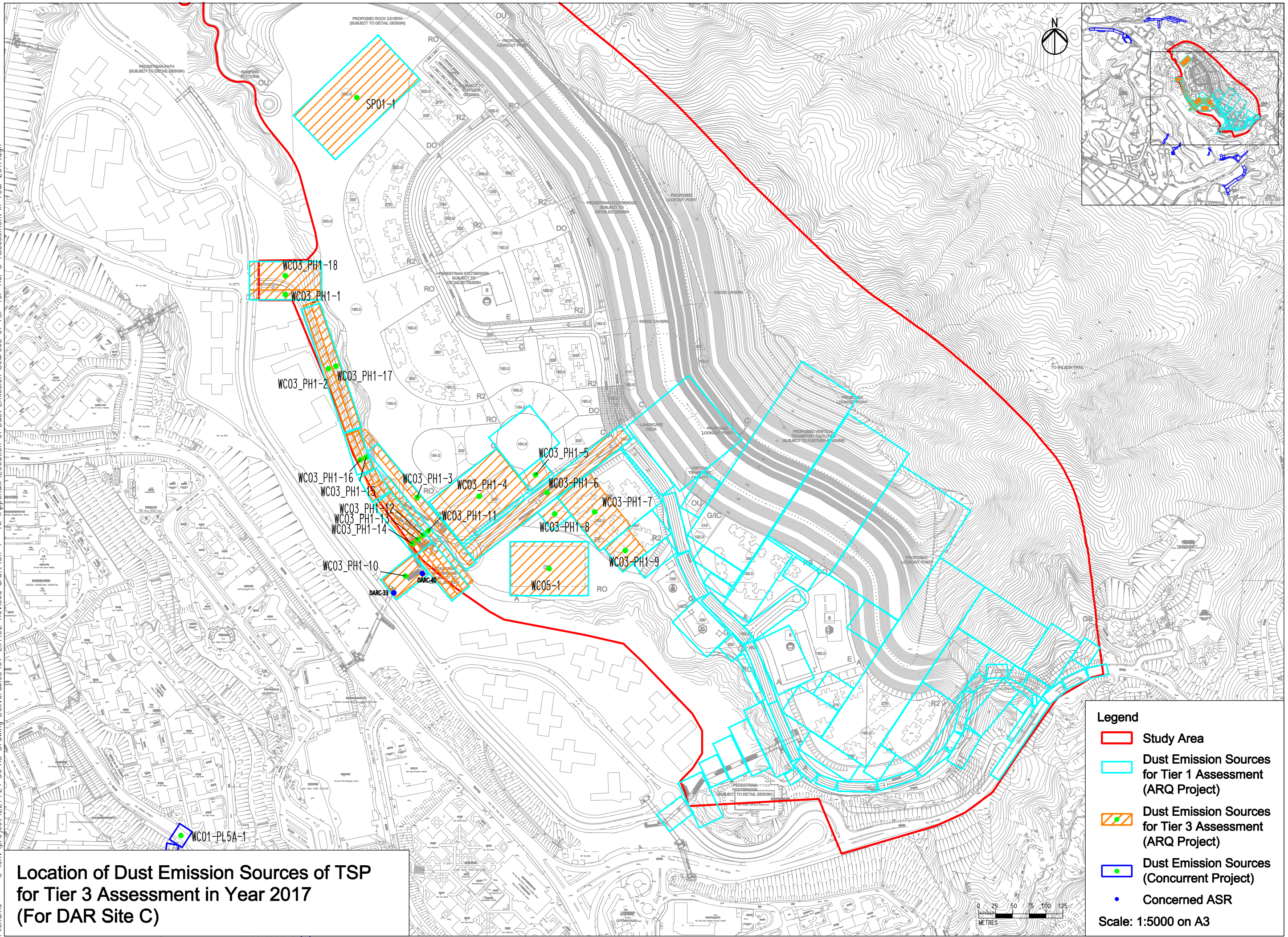
Legend

-  Study Area
-  Dust Emission Sources for Tier 1 Assessment (ARQ Project)
-  Dust Emission Sources for Tier 2 Assessment (ARQ Project)
-  Dust Emission Sources (Concurrent Project)
-  Concerned ASR

Scale: 1:5000 on A3



Location of Dust Emission Sources of TSP for Tier 2 Assessment in Year 2017 (For Ma Yau Tong Village)

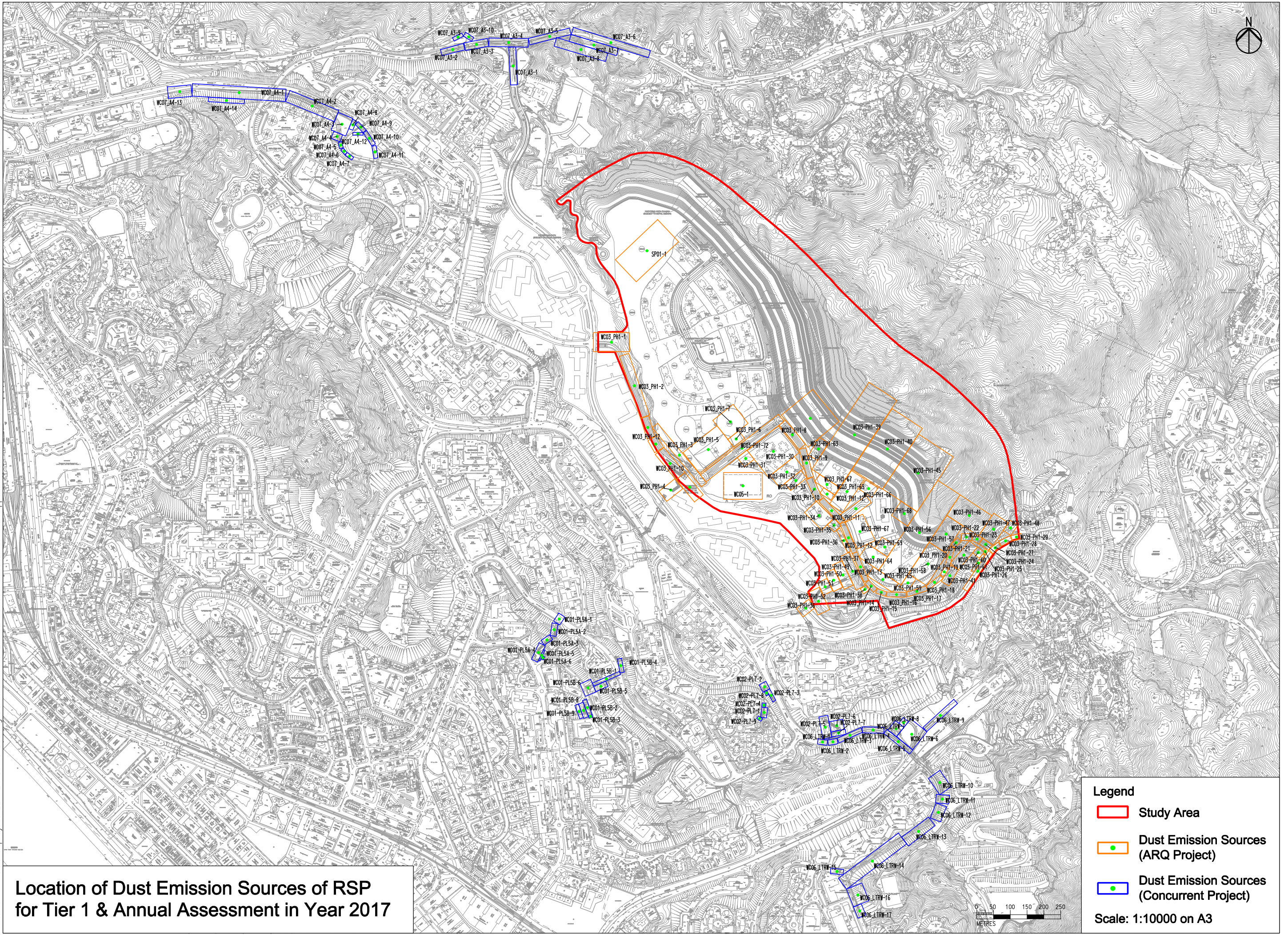


Location of Dust Emission Sources of TSP for Tier 3 Assessment in Year 2017 (For DAR Site C)

Legend

- Study Area
- Dust Emission Sources for Tier 1 Assessment (ARQ Project)
- Dust Emission Sources for Tier 3 Assessment (ARQ Project)
- Dust Emission Sources (Concurrent Project)
- Concerned ASR

Scale: 1:5000 on A3



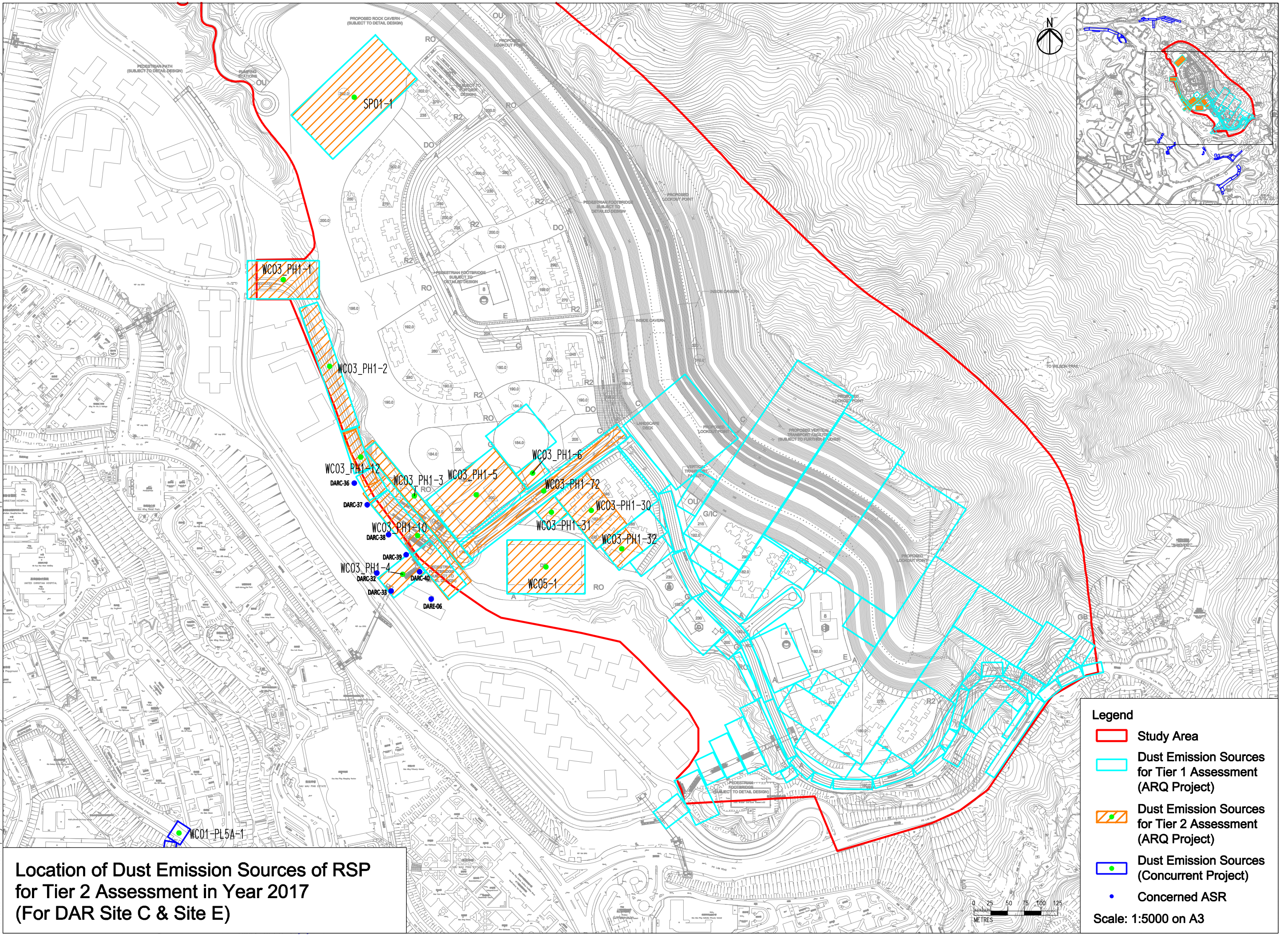
Location of Dust Emission Sources of RSP for Tier 1 & Annual Assessment in Year 2017

Legend

- Study Area
- Dust Emission Sources (ARQ Project)
- Dust Emission Sources (Concurrent Project)

Scale: 1:10000 on A3

2/27/2014
G:\env\project\227724-50\13 Drawing Deliverables\07 EIA\02 Revised draft\Ch 4 - Air\Appendix\Location of Dust Emission Sources of RSP for Tier 2 Assessment in Year 2017 (DAR Site C & E).dgn

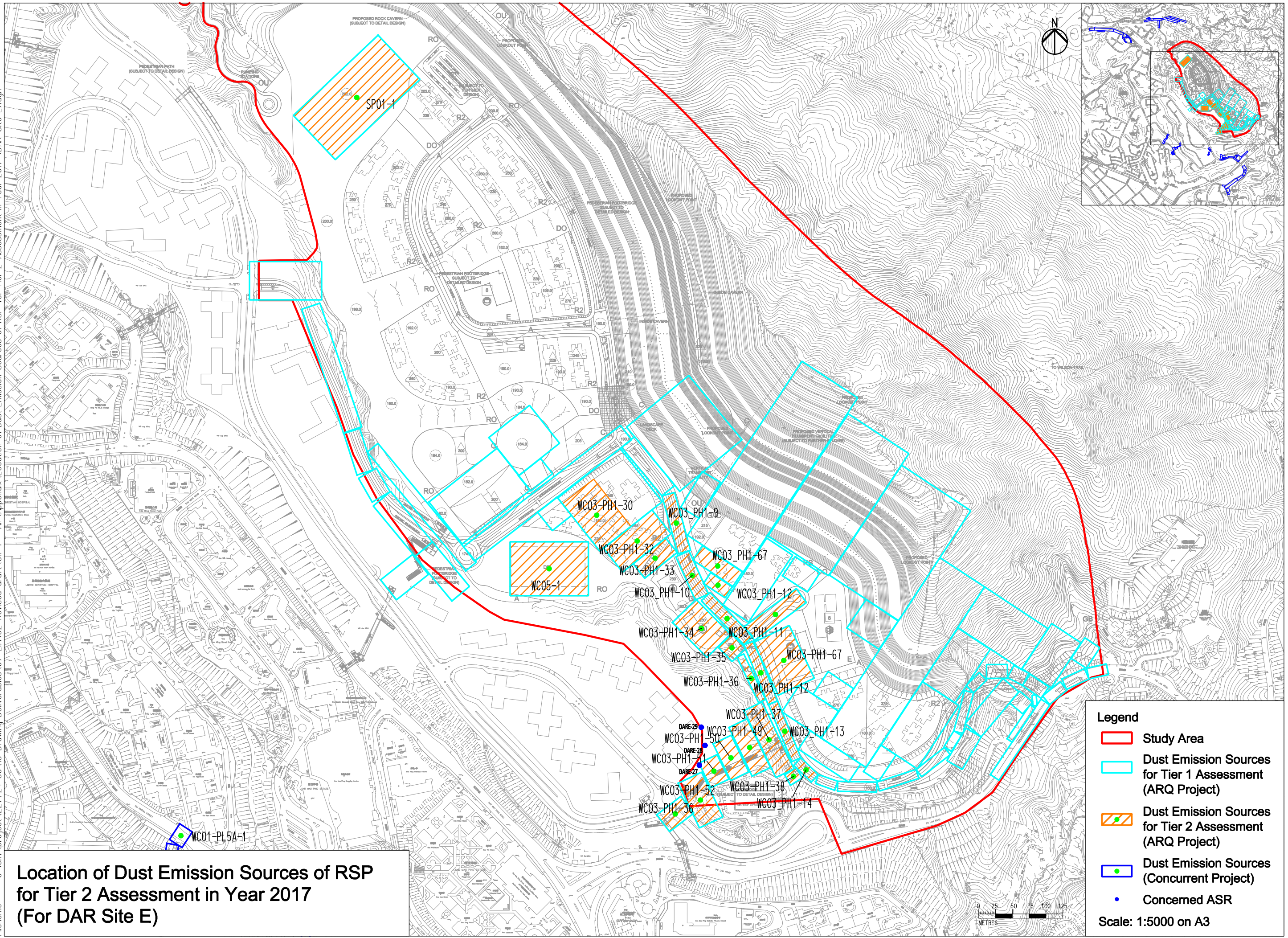


**Location of Dust Emission Sources of RSP
for Tier 2 Assessment in Year 2017
(For DAR Site C & Site E)**

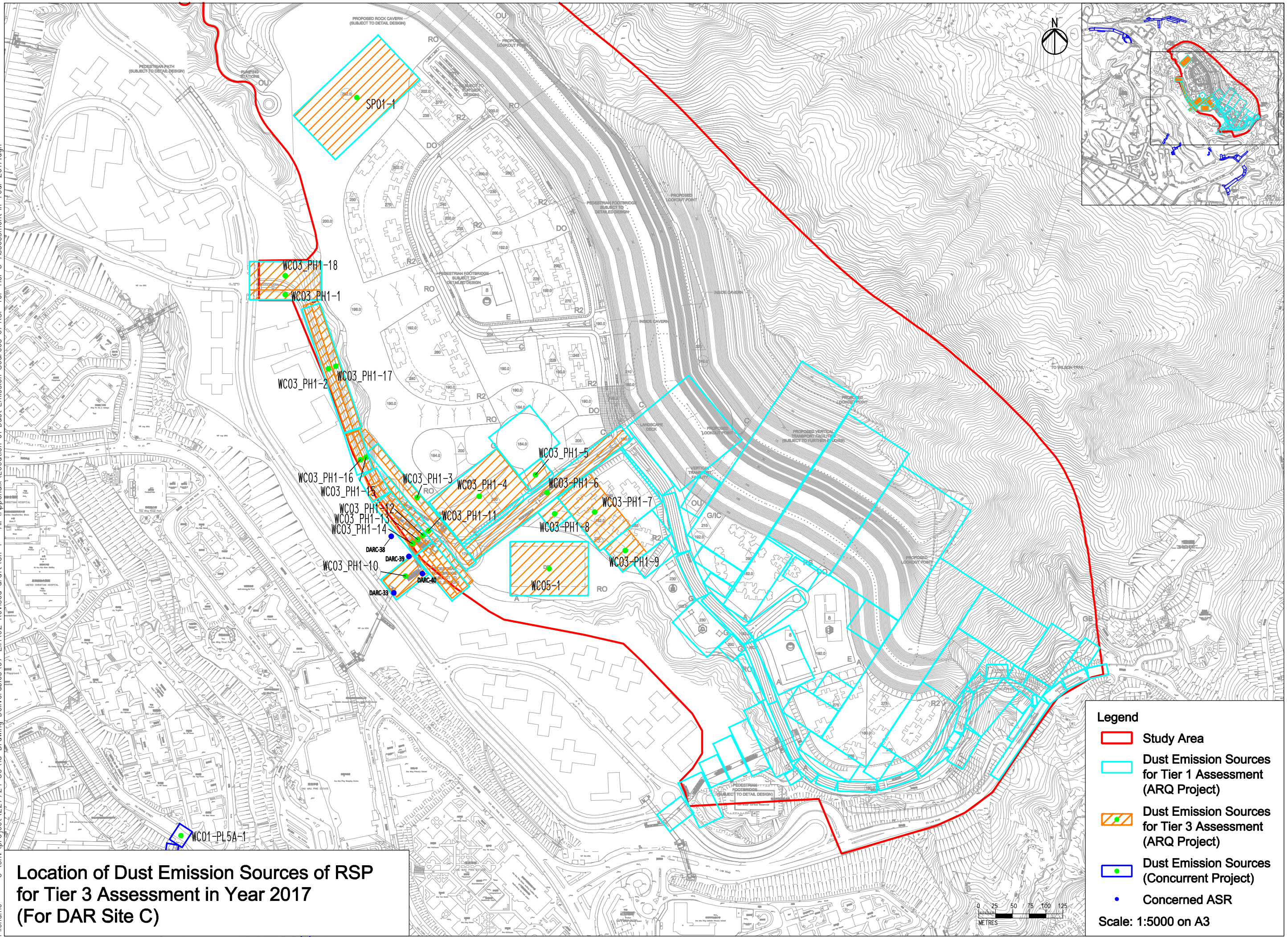
Legend

- Study Area
- Dust Emission Sources for Tier 1 Assessment (ARQ Project)
- Dust Emission Sources for Tier 2 Assessment (ARQ Project)
- Dust Emission Sources (Concurrent Project)
- Concerned ASR

Scale: 1:5000 on A3



Location of Dust Emission Sources of RSP for Tier 2 Assessment in Year 2017 (For DAR Site E)

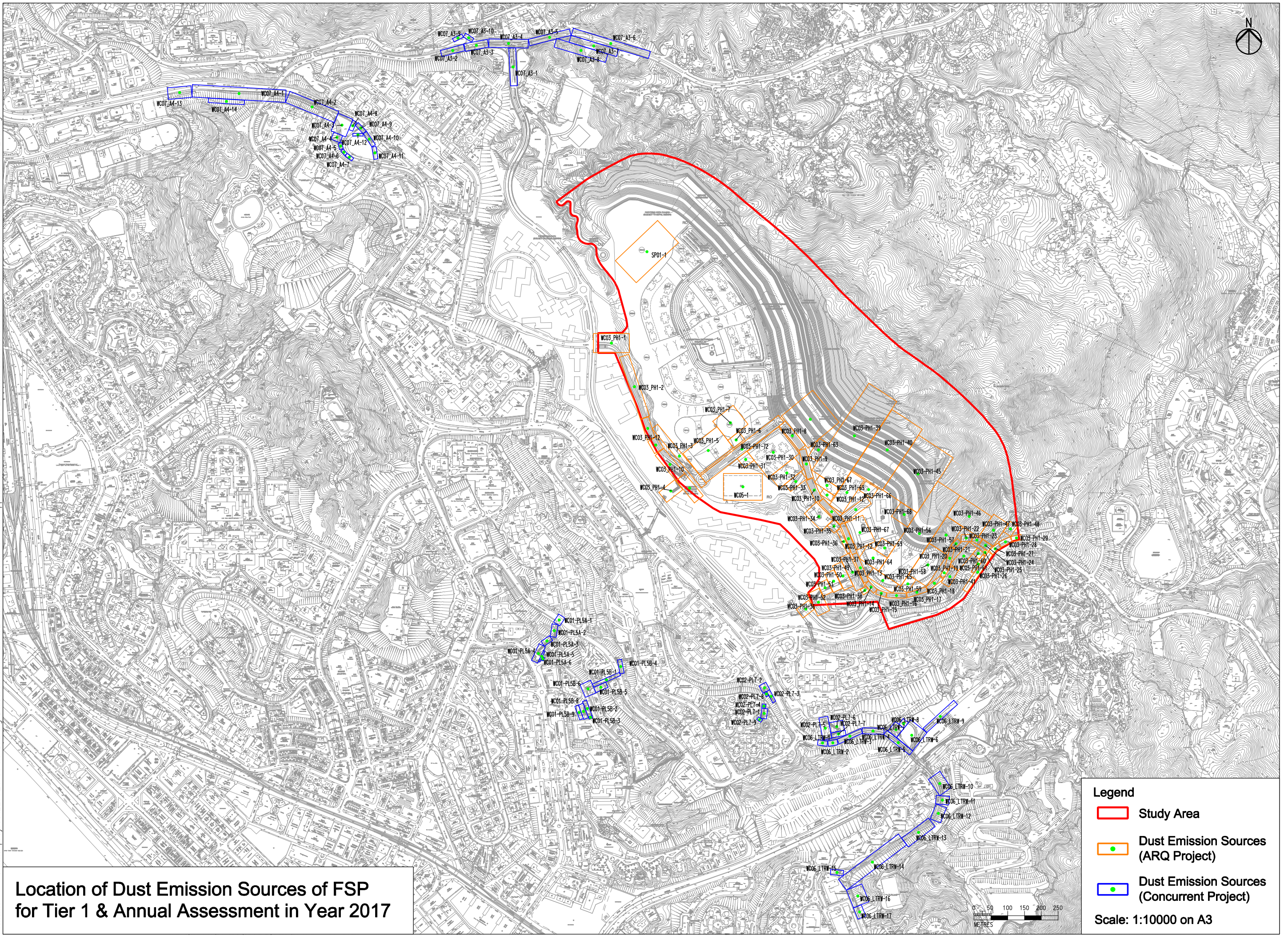


**Location of Dust Emission Sources of RSP
for Tier 3 Assessment in Year 2017
(For DAR Site C)**

Legend

- Study Area
- Dust Emission Sources for Tier 1 Assessment (ARQ Project)
- Dust Emission Sources for Tier 3 Assessment (ARQ Project)
- Dust Emission Sources (Concurrent Project)
- Concerned ASR

Scale: 1:5000 on A3

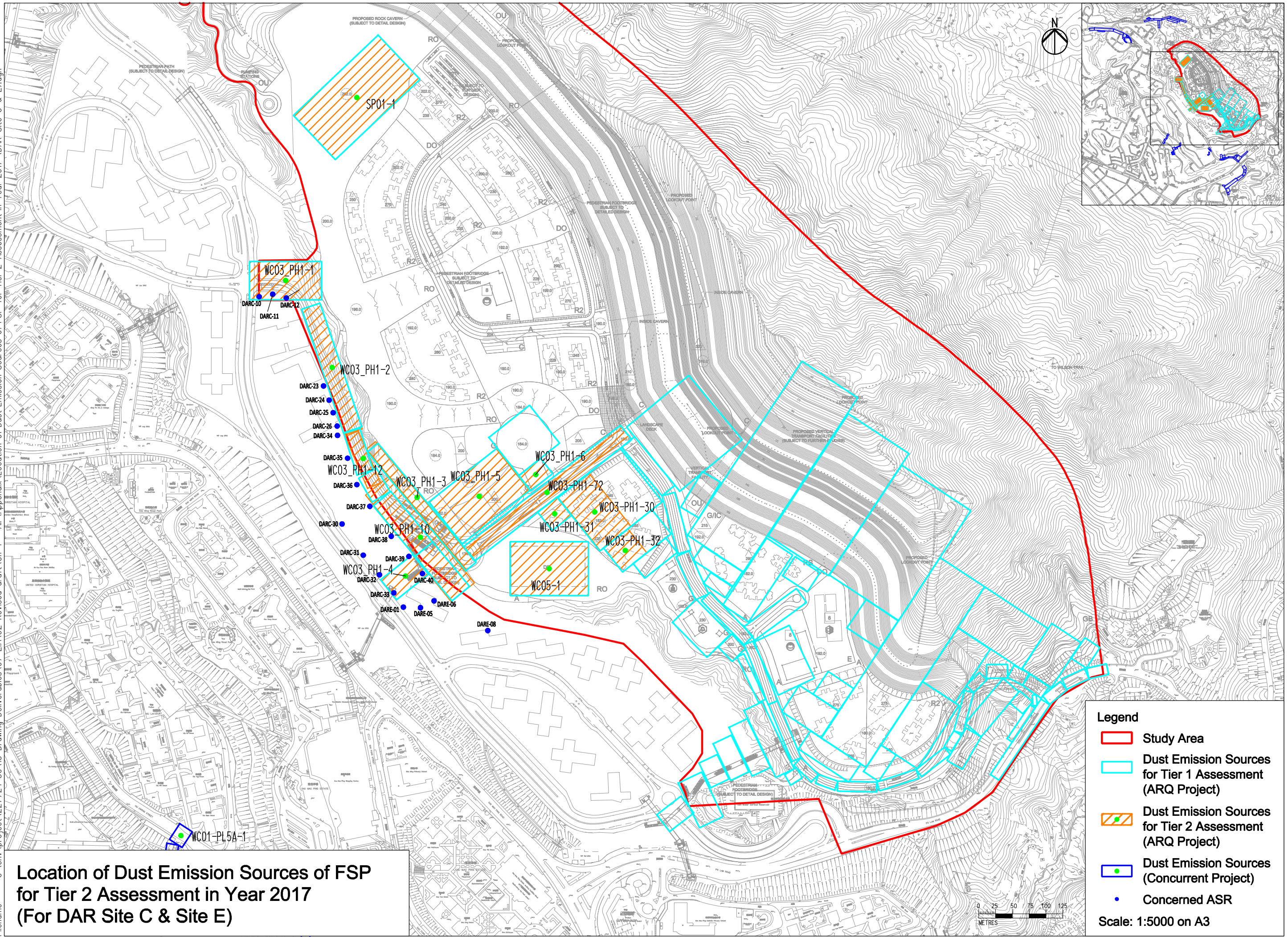


Location of Dust Emission Sources of FSP for Tier 1 & Annual Assessment in Year 2017

Legend

- Study Area
- Dust Emission Sources (ARQ Project)
- Dust Emission Sources (Concurrent Project)

Scale: 1:10000 on A3

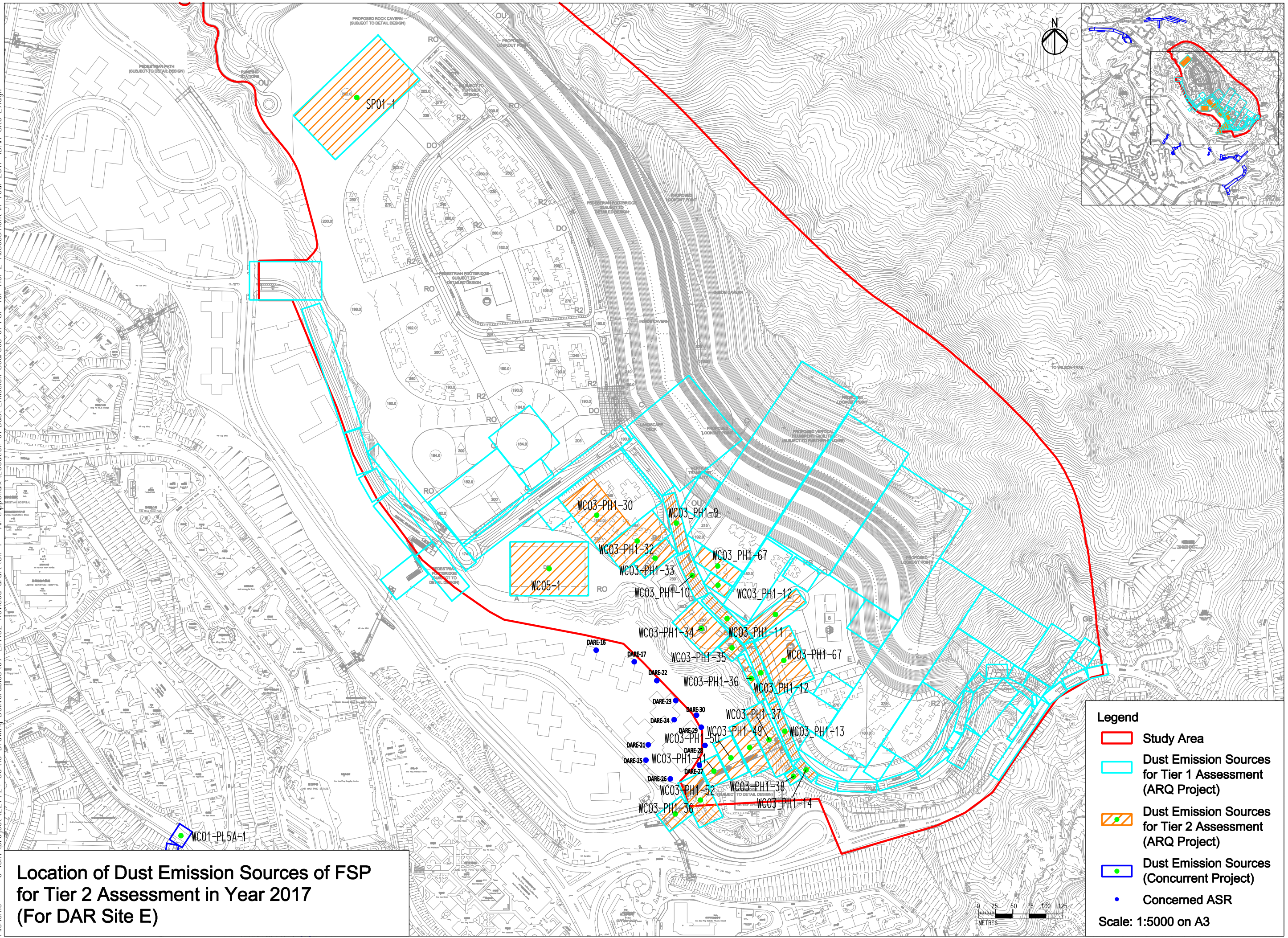


**Location of Dust Emission Sources of FSP
for Tier 2 Assessment in Year 2017
(For DAR Site C & Site E)**

Legend

- Study Area
- Dust Emission Sources for Tier 1 Assessment (ARQ Project)
- Dust Emission Sources for Tier 2 Assessment (ARQ Project)
- Dust Emission Sources (Concurrent Project)
- Concerned ASR

Scale: 1:5000 on A3



Location of Dust Emission Sources of FSP for Tier 2 Assessment in Year 2017 (For DAR Site E)