

### Appendix 3.1 Calculation of Dust Emission

Source	Emission Factors	Unmitigated	Parameters		Remarks
<b>Plant Basement</b>	Heavy construction activities (g/m2/s)	7.39439E-05	TSP emission factor (Mg/hectare/month of activity) Percentage area actively operating (%) % of dust suppression	2.69 47.5% 50%	from AP-42, 5th ed., S13.2.3.3 estimated for watering twice a day & other dust suppression measures
	Wind erosion of exposed areas E (g/m2/s)	2.69533E-06	TSP emission factor (Mg/hectare/yr) % of dust suppression	0.85 0%	from AP-42, 5th ed., Table 11.9.4 Assumed there is no watering after the working hours
<b>TST Connection Chamber</b>	Heavy construction activities (g/m2/s)	2.17940E-05	TSP emission factor (Mg/hectare/month of activity) Percentage area actively operating (%) % of dust suppression	2.69 14.0% 50%	from AP-42, 5th ed., S13.2.3.3 estimated for watering twice a day & other dust suppression measures
	Wind erosion of exposed areas E (g/m2/s)	2.69533E-06	TSP emission factor (Mg/hectare/yr) % of dust suppression	0.85 0%	from AP-42, 5th ed., Table 11.9.4 Assumed there is no watering after the working hours
<b>Satellite Concourse</b>	Heavy construction activities (g/m2/s)	4.76354E-05	TSP emission factor (Mg/hectare/month of activity) Percentage area actively operating (%) % of dust suppression	2.69 30.6% 50%	from AP-42, 5th ed., S13.2.3.3 estimated for watering twice a day & other dust suppression measures
	Wind erosion of exposed areas E (g/m2/s)	2.69533E-06	TSP emission factor (Mg/hectare/yr) % of dust suppression	0.85 0%	from AP-42, 5th ed., Table 11.9.4 Assumed there is no watering after the working hours
<b>Emergency Exit at MSC</b>	Heavy construction activities (g/m2/s)	6.60046E-05	TSP emission factor (Mg/hectare/month of activity) Percentage area actively operating (%) % of dust suppression	2.69 42.4% 50%	from AP-42, 5th ed., S13.2.3.3 estimated for watering twice a day & other dust suppression measures
	Wind erosion of exposed areas E (g/m2/s)	2.69533E-06	TSP emission factor (Mg/hectare/yr) % of dust suppression	0.85 0%	from AP-42, 5th ed., Table 11.9.4 Assumed there is no watering after the working hours

**Note:**

- 1 Emission factors (EF) for heavy construction operations have been applied in this assessment. Wind erosion has already been included as one of the dust emission activities during heavy construction. Thus, wind erosion is assumed to take place during the day and after working hours.
- 2 The number of working days in a month is 30 days.