

Site		2005	2006	2007	2008	2009	2010	2011	2012 ^(c)	Ave
	D5	1.4	1.3	1.7	1.4	2.2	0.8	0.9	-	1.4
	D6	1.5	1	1.7	1.9	2.6	0.9	1.1	-	1.5
	D7	0.8	1.2	1.5	1.6	2.4	0.8	1	-	1.3
	D8	1.1	1.1	1.3	1.2	2	0.9	1.1	-	1.2
	D9	1.1	1.3	1	2.3	2.3	1.5	4.4	-	2.0
	D10	1.1	0.8	1.1	1.1	2	0.4	0.5	-	1.0
	D11	1.5	1.2	1	1.4	2.6	0.7	0.4	-	1.3
	D12	1.1	1.6	1.9	2.9	4.8	5	1.6	-	2.7
	D13	1.5	1.8	2.2	2.4	2.9	1.6	0.4	-	1.8
	D14	0.9	0.9	1.6	7.4	4.7	5.7	1	-	3.2
	D15	-	-	-	1.1	22.4	1.1	1.8	-	6.6
Maules Creek	MC01	-	-	-	-	-	-	1	-	1.0
	MC02	-	-	-	-	-	-	1.3	-	1.3
	MC03	-	-	-	-	-	-	2.2	-	2.2
	MC04	-	-	-	-	-	-	1.3	-	1.3
Vickery ^(d)	V1	-	-	-	-	-	-	0.6	0.6	0.6
	V2	-	-	-	-	-	-	0.6	0.6	0.6
	V3	-	-	-	-	-	-	0.7	4.1	2.4
	V4	-	-	-	-	-	-	0.6	2.1	1.4
	V5	-	-	-	-	-	-	0.6	0.8	0.7

(a) data from August 2011.

(b) data to November 2008.

(c) data available to May/June 2012.

(d) data from October 2011 to August 2012.

Bold font indicates data above impact assessment criteria.

4.3 Total Suspended Particulate Matter Concentrations

No TSP concentration data are available in the vicinity of the Project. However, annual average TSP concentrations can be estimated from the PM₁₀ measurements by assuming that 40% of the TSP is PM₁₀. This relationship was obtained from data collected by co-located TSP and PM₁₀ monitors operated for long periods of time in the Hunter Valley (**NSW Minerals Council, 2000**).

Since the start of 2010, annual average PM₁₀ concentrations have been 10 to 12 µg/m³ across all sites (refer **Section 4.2.1**). As such, the background annual average TSP concentration for this period is estimated as 30 µg/m³.

4.4 PM_{2.5} Concentrations

PM_{2.5} concentrations are measured for the Project and the proposed Maules Creek Coal Project. Data has been collected for the Project and Maules Creek since April 2012 and November 2011, respectively. A plot of the 24-hour PM_{2.5} concentrations is shown in **Figure 4.8**.

The average PM_{2.5} concentration based on the available validated data for the Project and at Maules Creek is 4.6 µg/m³ and 4.5 µg/m³, respectively.