





**TABLE D-3a - CLASS II PSD (STANDARD 7)**

**Vulcan Construction Materials, LLC - Lexington Quarry**

**Dewatering Pump located in Full Pit**

Pollutant	2002 Modeled Impact (µg/m³)	2003 Modeled Impact (µg/m³)	2004 Modeled Impact (µg/m³)	2005 Modeled Impact (µg/m³)	2006 Modeled Impact (µg/m³)	Maximum Modeled Conc (µg/m³)	Standard (µg/m³)	PASS?
PM <sub>10</sub> 24-hr	20.24	26.10	25.86	18.24	21.02	26.10	30	YES
PM <sub>10</sub> Annual	1.82	1.80	1.55	1.49	1.83	1.83	17	YES
PM <sub>2.5</sub> 24-hr	3.45	4.00	3.76	5.06	4.13	5.06	9	YES
PM <sub>2.5</sub> Annual	0.24	0.22	0.19	0.19	0.23	0.24	4	YES
SO <sub>2</sub> Annual	0.102	0.095	0.098	0.104	0.084	0.10	20	YES
SO <sub>2</sub> 24-hr	0.88	0.68	0.77	0.56	0.65	0.88	91	YES
SO <sub>2</sub> 3-hr	1.36	1.13	1.18	1.39	1.29	1.39	512	YES
NO <sub>2</sub> Annual	0.07	0.06	0.06	0.07	0.05	0.07	25	YES

**Notes:**

The PM<sub>10</sub> 24-hr modeled impact is the maximum high-2nd-high 24-hr result over 5 years.

The PM<sub>10</sub> and PM<sub>2.5</sub> annual modeled impact is the maximum high result over 5 years.

The SO<sub>2</sub> 3-hr modeled impact is the maximum high-2nd-high 24-hr result over 5 years.

The SO<sub>2</sub> 24-hr and annual modeled impact is the maximum high result over 5 years.

The NO<sub>2</sub> annual modeled impact is the maximum high result over 5 years

PM modeling completed during plant operating hours of 6am - 8 pm Monday - Saturday, no operations on Sunday

NO<sub>2</sub> modeling completed using the emission factor of 1g/kW-hr (John Deere Final Tier 4/Stage IV pump engine)

**TABLE D-3b - CLASS II PSD (STANDARD 7)**

**Vulcan Construction Materials, LLC - Lexington Quarry**

**Dewatering Pump located in Initial Pit**

Pollutant	2002 Modeled Impact (µg/m³)	2003 Modeled Impact (µg/m³)	2004 Modeled Impact (µg/m³)	2005 Modeled Impact (µg/m³)	2006 Modeled Impact (µg/m³)	Maximum Modeled Conc (µg/m³)	Standard (µg/m³)	PASS?
PM <sub>10</sub> 24-hr	0.73	0.74	0.72	0.75	0.80	0.80	30	YES
PM <sub>10</sub> Annual	0.08	0.08	0.09	0.07	0.08	0.09	17	YES
PM <sub>2.5</sub> 24-hr	0.79	0.83	0.87	1.15	0.97	1.15	9	YES
PM <sub>2.5</sub> Annual	0.08	0.08	0.09	0.07	0.08	0.09	4	YES
SO <sub>2</sub> Annual	1.98	2.09	2.20	1.86	2.12	2.20	20	YES
SO <sub>2</sub> 24-hr	19.75	20.74	21.75	28.82	24.23	28.82	91	YES
SO <sub>2</sub> 3-hr	74.05	67.75	79.49	68.54	67.71	79.49	512	YES
NO <sub>2</sub> Annual	1.27	1.34	1.41	1.19	1.36	1.41	25	YES

**Notes:**

The PM<sub>10</sub> 24-hr modeled impact is the maximum high-2nd-high 24-hr result over 5 years.

The PM<sub>10</sub> and PM<sub>2.5</sub> annual modeled impact is the maximum high result over 5 years.

The SO<sub>2</sub> 3-hr modeled impact is the maximum high-2nd-high 24-hr result over 5 years.

The SO<sub>2</sub> 24-hr and annual modeled impact is the maximum high result over 5 years.

The NO<sub>2</sub> annual modeled impact is the maximum high result over 5 years

NO<sub>2</sub> modeling completed using the emission factor of 1g/kW-hr (John Deere Final Tier 4/Stage IV pump engine)