

**SWCRR**  
**GRAVEL OPERATIONS AIR QUALITY MONITORING**  
**UPDATED MAY 4, 2018**

Substance	TSP (24 hr. avg. max. 100 µg/m³)				PM <sub>2.5</sub> (24 hr. avg. max. 30 µg/m³)				CRAZ NW	Silica Indicator (12 hr. avg. max. 5 µg/m³)			
	A1	A2	A3	A4	A1	A2	A3	A4		A1	A2	A3	A4
2-Jun	5.00	-	-	-	1.90	0.00	0.00	-	-	0.15	-	-	-
3-Jun	3.00	-	-	-	1.14	0.00	0.00	-	-	0.09	-	-	-
4-Jun	7.00	-	-	-	2.66	0.00	0.00	-	-	0.21	-	-	-
5-Jun	4.00	-	-	-	1.52	0.00	0.00	-	-	0.12	-	-	-
6-Jun	10.00	6.00	-	-	3.04	1.90	0.00	-	-	0.30	0.16	-	-
7-Jun	13.00	10.00	-	-	3.04	3.80	0.00	-	-	0.36	0.30	-	-
8-Jun	9.00	7.00	-	-	1.90	2.66	0.00	-	-	0.33	0.21	-	-
9-Jun	2.00	0.00	2.00	-	0.38	0.00	0.38	-	-	0.06	0.00	0.03	-
10-Jun	3.00	1.00	1.00	-	0.76	0.38	0.38	-	-	0.09	0.03	0.03	-
11-Jun	6.00	2.00	3.00	-	1.90	0.76	0.76	-	-	0.18	0.06	0.06	-
12-Jun	10.00	6.00	39.00	-	3.04	2.28	6.84	-	-	0.30	0.18	0.55	-
13-Jun	12.00	12.00	12.00	-	3.80	4.18	3.42	-	-	0.36	0.33	0.36	-
14-Jun	3.00	4.00	0.00	-	1.14	1.14	0.00	-	-	0.12	0.12	0.06	-
15-Jun	0.00	3.00	2.00	-	0.00	0.76	0.38	-	-	0.00	0.09	0.03	-
16-Jun	-	2.00	1.00	-	-	0.38	0.00	-	-	-	0.06	0.03	-
17-Jun	-	5.00	4.00	-	-	1.14	0.76	-	-	-	0.12	0.09	-
18-Jun	-	2.00	2.00	-	-	0.76	0.38	-	-	-	0.06	0.06	-
19-Jun	-	7.00	6.00	-	-	1.14	1.52	-	-	-	0.18	0.18	-
20-Jun	-	5.00	0.00	-	-	0.76	0.00	-	-	-	0.12	0.00	-
21-Jun	1.00	4.00	4.00	-	0.38	0.38	0.38	-	-	0.03	0.12	0.09	-
22-Jun	1.00	3.00	4.00	-	0.00	1.14	0.76	-	-	0.00	0.06	0.09	-
23-Jun	3.00	5.00	3.00	-	1.14	1.52	0.76	-	-	0.08	0.15	0.09	-
24-Jun	6.00	3.00	2.00	-	2.28	0.76	0.38	-	-	0.16	0.09	0.06	-
25-Jun	8.00	4.00	7.00	-	2.66	0.76	1.90	-	-	0.24	0.09	0.18	-
26-Jun	3.00	12.00	6.00	-	1.14	2.66	1.14	-	-	0.00	0.33	0.15	-
27-Jun	3.00	5.00	5.00	-	1.14	0.76	0.00	-	-	0.08	0.15	0.09	-
28-Jun	2.00	0.00	0.00	-	0.76	0.00	0.00	-	-	0.00	0.00	0.00	-
29-Jun	5.00	2.00	0.00	-	1.90	0.38	0.00	-	-	0.14	0.06	0.00	-
30-Jun	4.00	4.00	0.00	-	1.52	0.76	0.00	-	-	0.12	0.12	0.00	-
1-Jul	3.00	3.00	9.00	-	1.14	0.38	2.66	-	-	0.09	0.09	0.27	-
2-Jul	11.00	7.00	6.00	-	4.18	2.28	1.90	-	-	0.33	0.21	0.18	-
3-Jul	11.00	13.00	7.00	-	4.18	4.56	1.90	-	-	0.33	0.40	0.18	-
4-Jul	4.00	5.00	4.00	-	1.52	1.14	0.00	-	-	0.12	0.15	0.09	-
5-Jul	6.00	0.00	8.00	-	2.28	0.00	0.76	-	-	0.18	0.00	0.21	-
6-Jul	9.00	0.00	26.00	-	3.42	0.00	3.42	-	-	0.27	0.00	0.64	-
7-Jul	6.00	3.00	17.00	-	2.28	0.00	2.66	-	-	0.18	0.09	0.46	-
8-Jul	13.00	19.00	13.00	-	4.94	6.46	3.04	-	-	0.40	0.58	0.36	-
9-Jul	15.00	20.00	11.00	-	5.70	6.46	2.66	-	-	0.46	0.58	0.30	-
10-Jul	19.00	22.00	7.00	-	7.22	8.36	1.90	-	-	0.57	0.67	0.21	-
11-Jul	22.00	22.00	0.00	-	8.36	8.36	0.00	-	-	0.63	0.67	0.00	-
12-Jul	40.00	40.00	25.00	-	15.20	14.82	8.74	-	-	1.22	1.22	0.76	-
13-Jul	16.00	19.00	0.00	-	6.08	6.84	0.00	-	-	0.49	0.58	0.00	-
14-Jul	11.00	18.00	17.00	-	4.18	6.08	4.56	-	-	0.33	0.55	0.49	-
15-Jul	13.00	15.00	5.00	-	4.94	4.94	0.38	-	-	0.40	0.46	0.12	-
16-Jul	59.00	57.00	6.00	-	22.42	20.90	1.52	-	-	1.79	1.70	0.15	-
17-Jul	158.00	146.00	44.00	-	60.04	54.72	15.58	-	-	4.80	4.44	1.31	-
18-Jul	47.00	40.00	3.00	-	16.34	14.06	0.00	-	-	1.37	1.22	0.06	-
19-Jul	123.00	98.00	9.00	-	44.08	36.48	1.52	-	-	3.68	2.95	0.21	-
20-Jul	71.00	65.00	2.00	-	24.32	21.28	0.00	-	-	2.10	1.95	0.03	-
21-Jul	22.00	14.00	3.00	-	6.46	4.94	0.38	-	-	0.61	0.43	0.06	-
22-Jul	19.00	14.00	2.00	-	6.08	5.32	0.00	-	-	0.56	0.43	0.06	-
23-Jul	10.00	4.00	3.00	-	1.90	1.14	0.38	-	-	0.26	0.12	0.06	-
24-Jul	17.00	2.00	2.00	-	1.14	0.38	0.38	-	-	0.36	0.06	0.06	-
25-Jul	12.00	6.00	4.00	-	2.28	1.90	0.38	-	-	0.30	0.18	0.09	-
26-Jul	11.00	11.00	10.00	-	3.42	3.04	0.76	-	-	0.30	0.33	0.24	-
27-Jul	36.00	30.00	10.00	-	11.78	10.64	0.76	-	-	1.03	0.91	0.21	-
28-Jul	33.00	29.00	40.00	-	11.40	10.26	7.07	-	-	0.97	0.85	0.84	-
29-Jul	25.00	22.00	-	-	8.74	7.98	-	-	-	0.73	0.67	-	-
30-Jul	71.00	63.00	-	-	26.22	23.56	-	-	-	2.13	1.92	-	-
31-Jul	126.00	106.00	-	-	45.98	39.90	-	-	-	3.77	3.22	-	-

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	A1	A2	A3	A4	A1	A2	A3	A4		A1	A2	A3	A4
1-Aug	43.00	35.00	135.40	-	15.96	12.92	15.05	-	-	1.31	1.06	1.64	-
2-Aug	17.00	14.00	26.50	-	6.08	5.32	4.75	-	-	0.52	0.43	0.67	-
3-Aug	25.00	20.00	126.80	-	9.12	7.22	5.24	-	-	0.76	0.61	0.95	-
4-Aug	21.00	8.00	93.00	-	4.94	3.04	7.94	-	-	0.58	0.24	1.29	-
5-Aug	11.00	9.00	-	-	3.80	3.04	-	-	-	0.33	0.27	-	-
6-Aug	19.00	14.00	-	-	6.46	4.94	-	-	-	0.55	0.43	-	-
7-Aug	30.00	23.00	-	-	10.64	8.36	-	-	-	0.91	0.70	-	-
8-Aug	31.00	24.00	45.70	-	11.02	8.74	3.65	-	-	0.94	0.73	0.56	-
9-Aug	42.00	29.00	56.90	-	14.06	10.64	7.30	-	-	1.22	0.88	0.95	-
10-Aug	79.00	27.00	62.60	-	16.72	9.88	11.59	-	-	2.04	0.82	1.09	-
11-Aug	45.00	18.00	51.80	-	9.50	6.08	7.79	-	-	1.16	0.52	0.93	-
12-Aug	30.00	19.00	-	-	8.74	6.46	-	-	-	0.85	0.58	-	-
13-Aug	73.00	53.00	-	-	25.46	19.76	-	-	-	1.65	1.61	-	-
14-Aug	208.00	162.00	86.40	-	78.66	61.56	15.09	-	-	6.32	4.92	1.65	-
15-Aug	90.00	65.00	27.90	-	33.06	24.70	7.18	-	-	2.71	1.98	0.65	-
16-Aug	88.00	65.00	49.80	-	31.16	24.32	11.48	-	-	2.61	1.98	1.08	-
17-Aug	133.00	94.00	66.80	-	47.50	35.34	10.45	-	-	3.95	2.86	1.36	-
18-Aug	64.00	40.00	-	-	19.76	14.44	-	-	-	1.82	1.22	-	-
19-Aug	23.00	15.00	-	-	5.32	5.32	-	-	-	0.61	0.46	-	-
20-Aug	54.00	38.00	-	-	18.62	14.06	-	-	-	1.61	1.12	-	-
21-Aug	34.00	23.00	45.30	-	10.64	8.36	7.90	-	-	0.97	0.70	0.94	-
22-Aug	29.00	17.00	59.70	-	8.36	5.70	8.44	-	-	0.82	0.52	1.04	-
23-Aug	-	20.00	85.10	-	0.00	6.84	13.64	-	-	0.00	0.61	1.54	-
24-Aug	-	30.00	107.30	-	0.00	9.50	14.97	-	-	0.00	0.91	1.66	-
25-Aug	24.00	7.00	-	-	5.32	2.28	-	-	-	0.55	0.21	-	-
26-Aug	61.00	18.00	-	-	9.88	6.46	-	-	-	1.22	0.55	-	-
27-Aug	35.00	27.00	-	-	11.02	10.26	-	-	-	0.97	0.82	-	-
28-Aug	37.00	17.00	56.90	-	7.60	6.08	8.59	-	-	0.85	0.52	0.91	-
29-Aug	49.00	16.00	566.90	-	7.60	4.94	171.38	-	-	1.00	0.46	14.66	-
30-Aug	148.00	111.00	584.30	-	46.74	40.28	181.98	-	-	4.04	3.37	15.74	-
31-Aug	204.00	121.00	581.50	-	52.44	45.22	54.30	-	-	5.05	3.68	7.16	-
1-Sep	99.00	79.00	-	-	31.92	29.26	-	-	-	2.77	2.40	-	-
2-Sep	121.00	76.00	-	-	31.16	27.36	-	-	-	3.07	2.28	-	-
3-Sep	18.00	12.00	-	-	4.56	4.18	-	-	-	0.46	0.36	-	-
4-Sep	11.00	9.00	-	-	3.04	3.04	-	-	-	0.30	0.24	-	-
5-Sep	45.00	33.00	262.00	-	12.54	11.40	52.06	-	-	1.19	1.00	5.06	-
6-Sep	104.00	75.00	-	-	29.64	27.36	-	-	-	2.74	2.28	-	-
7-Sep	129.00	104.00	494.90	-	39.14	38.38	60.91	-	-	3.53	3.16	8.86	-
8-Sep	212.00	153.00	-	-	61.94	57.00	-	-	-	5.65	4.65	-	-

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Substance	TSP (24 hr. avg. max. 100 µg/m³)				PM <sub>2.5</sub> (24 hr. avg. max. 30 µg/m³)				CRAZ NW	Silica Indicator (12 hr. avg. max. 5 µg/m³)			
	A1	A2	A3	A4	A1	A2	A3	A4		A1	A2	A3	A4
9-Sep	75.00	73.00	-	-	26.60	27.36	-	-	-	2.19	2.22	-	-
10-Sep	5.00	3.00	-	-	1.14	1.14	-	-	-	0.12	0.09	-	-
11-Sep	16.00	8.00	131.90	-	3.04	2.66	16.72	-	-	0.36	0.24	1.76	-
12-Sep	18.00	5.00	65.90	-	2.28	1.52	6.57	-	-	0.33	0.15	0.74	-
13-Sep	4.00	2.00	-	-	1.14	0.76	-	-	-	0.12	0.06	-	-
14-Sep	6.00	4.00	-	-	1.90	1.52	-	-	-	0.18	0.12	-	-
15-Sep	9.00	8.00	-	-	3.04	3.04	-	-	-	0.27	0.24	-	-
16-Sep	9.00	6.00	-	-	3.04	2.28	-	-	-	0.24	0.18	-	-
17-Sep	22.00	14.00	-	-	7.60	5.32	-	-	-	0.64	0.43	-	-
18-Sep	31.00	13.00	46.20	-	11.02	4.94	2.36	-	-	0.91	0.40	0.50	-
19-Sep	5.00	3.00	20.70	-	1.14	1.14	1.37	-	-	0.12	0.09	0.36	-
20-Sep	8.00	2.00	30.30	-	1.14	0.38	1.29	-	-	0.15	0.06	0.36	-
21-Sep	1.00	0.00	33.50	-	0.38	0.00	2.43	-	-	0.03	0.00	0.48	-
22-Sep	1.00	1.00	22.30	-	0.00	0.38	0.84	-	-	0.00	0.03	0.27	-
23-Sep	6.00	2.00	-	-	1.90	0.38	-	-	-	0.18	0.03	-	-
24-Sep	6.00	1.00	-	-	1.90	0.38	-	-	-	0.15	0.03	-	-
25-Sep	8.00	0.00	19.90	-	1.52	0.00	0.53	-	-	0.18	0.00	0.33	-
26-Sep	11.00	1.00	18.40	-	1.52	0.00	0.49	-	-	0.21	0.03	0.40	-
27-Sep	10.00	1.00	25.30	-	1.90	0.38	1.33	-	-	0.21	0.03	0.22	-
28-Sep	12.00	5.00	54.40	-	3.04	1.52	2.81	-	-	0.30	0.12	0.70	-
29-Sep	19.00	7.00	52.20	-	5.70	2.28	1.79	-	-	0.52	0.21	0.65	-
30-Sep	15.00	2.00	-	-	4.56	0.38	-	-	-	0.43	0.06	-	-
1-Oct	8.00	1.00	-	-	1.14	0.00	-	-	-	0.15	0.00	-	-
2-Oct	6.00	1.00	30.30	-	0.38	0.00	1.33	-	-	0.09	0.03	0.50	-
3-Oct	4.00	1.00	-	-	1.14	0.38	-	-	-	0.09	0.03	-	-
4-Oct	12.00	2.00	-	-	3.80	0.38	-	-	-	0.21	0.06	-	-
5-Oct	12.00	3.00	-	-	3.42	1.14	-	-	-	0.33	0.09	-	-
6-Oct	8.00	2.00	8.00	-	2.28	0.38	2.66	-	-	0.21	0.06	0.24	-
7-Oct	2.00	0.00	3.00	-	0.38	0.00	1.14	-	-	0.06	0.00	0.09	-
8-Oct	3.00	0.00	4.00	-	0.38	0.00	1.52	-	-	0.06	0.00	0.12	-
9-Oct	5.00	1.00	6.00	-	1.14	0.38	2.28	-	-	0.12	0.03	0.18	-
10-Oct	12.00	2.00	11.00	-	3.04	0.76	3.42	-	-	0.30	0.06	0.33	-
11-Oct	7.00	3.00	8.00	-	2.28	1.14	3.04	-	-	0.18	0.09	0.24	-
12-Oct	6.00	3.00	9.00	-	2.28	1.14	3.42	-	-	0.18	0.09	0.27	-
13-Oct	15.00	8.00	16.00	-	5.32	3.04	6.08	-	-	0.46	0.24	0.49	-
14-Oct	13.00	3.00	10.00	-	2.66	1.14	3.42	-	-	0.27	0.09	0.27	-
15-Oct	3.00	1.00	6.00	-	0.76	0.00	2.28	-	-	0.06	0.03	0.18	-
16-Oct	5.00	2.00	6.00	-	0.76	0.38	1.90	-	-	0.09	0.03	0.18	-
17-Oct	11.00	17.00	11.00	-	0.76	0.76	2.28	-	-	0.15	0.40	0.27	-
18-Oct	3.00	2.00	8.00	-	0.38	0.38	2.66	-	-	0.06	0.06	0.24	-
19-Oct	8.00	1.00	10.00	-	1.14	0.00	2.66	-	-	0.15	0.00	0.27	-
20-Oct	12.00	0.00	6.00	-	1.90	0.00	2.28	-	-	0.27	0.00	0.18	-
21-Oct	3.00	1.00	7.00	-	0.38	0.38	2.66	-	-	0.06	0.03	0.21	-
22-Oct	1.00	0.00	7.00	-	0.00	0.00	2.28	-	-	0.03	0.00	0.21	-
23-Oct	2.00	0.00	7.00	-	0.38	0.00	2.66	-	-	0.03	0.00	0.21	-
24-Oct	6.00	-	11.00	-	1.14	-	3.80	-	-	0.12	-	0.30	-
25-Oct	27.00	-	12.00	-	3.04	-	3.80	-	-	0.49	-	0.33	-
26-Oct	1.00	8.00	16.00	-	2.66	2.66	5.70	-	-	0.24	0.24	0.49	-
27-Oct	12.00	9.00	15.00	-	1.90	1.90	4.94	-	-	0.24	0.24	0.46	-
28-Oct	15.00	5.00	15.00	-	2.28	0.76	4.94	-	-	0.30	0.15	0.43	-
29-Oct	12.00	0.00	12.00	-	1.14	0.00	4.18	-	-	0.21	0.00	0.33	-
30-Oct	6.00	6.00	13.00	-	0.76	0.76	4.56	-	-	0.12	0.18	0.40	-
31-Oct	4.00	4.00	15.00	-	1.14	0.76	5.32	-	-	0.12	0.09	0.46	-
1-Nov	6.00	1.00	14.00	-	1.14	0.38	5.32	-	-	0.15	0.03	0.43	-
2-Nov	10.00	3.00	17.00	-	2.66	1.14	6.46	-	-	0.24	0.09	0.52	-
3-Nov	10.00	5.00	21.00	-	3.04	1.90	7.98	-	-	0.24	0.15	0.64	-
4-Nov	10.00	7.00	23.00	-	3.42	2.66	8.36	-	-	0.30	0.21	0.70	-
5-Nov	10.00	7.00	23.00	-	3.80	2.66	8.74	-	-	0.30	0.21	0.70	-
6-Nov	5.00	4.00	18.00	-	1.90	1.52	6.84	-	-	0.15	0.12	0.55	-
7-Nov	13.00	28.00	28.00	-	4.56	9.50	9.88	-	-	0.36	0.82	0.85	-
8-Nov	36.00	27.00	52.00	-	13.30	9.12	19.38	-	-	1.06	0.79	1.55	-
9-Nov	36.00	25.00	39.00	-	13.68	9.12	14.82	-	-	1.09	0.73	1.19	-
10-Nov	13.00	6.00	26.00	-	4.18	1.90	9.50	-	-	0.36	0.18	0.76	-
11-Nov	22.00	4.00	25.00	-	4.94	1.14	9.50	-	-	0.55	0.12	0.76	-
12-Nov	6.00	3.00	23.00	-	1.52	0.38	8.36	-	-	0.15	0.09	0.70	-

**SWCRR**  
**GRAVEL OPERATIONS AIR QUALITY MONITORING**  
**UPDATED MAY 4, 2018**

Substance	TSP (24 hr. avg. max. 100 µg/m³)				PM <sub>2.5</sub> (24 hr. avg. max. 30 µg/m³)				CRAZ NW	Silica Indicator (12 hr. avg. max. 5 µg/m³)			
	A1	A2	A3	A4	A1	A2	A3	A4		A1	A2	A3	A4
13-Nov	9.00	4.00	25.00	-	1.90	0.38	8.36	-	-	0.21	0.09	0.73	-
14-Nov	29.00	19.00	52.00	-	11.02	7.22	19.76	-	-	0.88	0.58	1.58	-
15-Nov	30.00	25.00	58.00	-	11.02	7.98	20.90	-	-	0.91	0.73	1.73	-
16-Nov	31.00	2.00	56.00	-	11.78	0.76	20.90	-	-	0.94	0.06	1.70	-
17-Nov	37.00	24.00	63.00	-	13.68	9.12	23.56	-	-	1.09	0.73	1.92	-
18-Nov	6.00	4.00	29.00	-	1.90	1.14	11.02	-	-	0.15	0.12	0.88	-
19-Nov	4.00	2.00	28.00	-	0.76	0.00	9.88	-	-	0.09	0.03	0.82	-
20-Nov	10.00	8.00	38.00	-	3.42	2.28	14.44	-	-	0.30	0.24	1.16	-
21-Nov	18.00	15.00	51.00	-	6.46	4.94	18.62	-	-	0.55	0.46	1.55	-
22-Nov	51.00	4.00	32.00	-	11.40	0.00	11.78	-	-	1.00	0.12	0.97	-
23-Nov	21.00	3.00	34.00	-	7.98	0.76	12.92	-	-	0.64	0.09	1.03	-
24-Nov	-	1.00	34.00	-	-	0.38	12.54	-	-	-	0.03	1.03	-
25-Nov	-	1.00	36.00	-	-	0.00	13.68	-	-	-	0.03	1.09	-
26-Nov	-	1.00	37.00	-	-	0.38	14.06	-	-	-	0.03	1.12	-
27-Nov	-	1.00	40.00	-	-	0.00	14.82	-	-	-	0.03	1.19	-
28-Nov	-	25.00	53.00	-	-	0.38	17.48	-	-	-	0.58	1.55	-
29-Nov	15.00	0.00	45.00	-	5.70	0.00	16.72	-	-	0.46	0.00	1.34	-
30-Nov	14.00	1.00	48.00	-	5.32	0.00	17.86	-	-	0.43	0.03	1.46	-
1-Dec	3.00	1.00	49.00	-	0.76	-0.76	18.24	-	-	0.09	0.00	1.49	-
2-Dec	9.00	4.00	57.00	-	3.04	1.14	21.28	-	-	0.24	0.12	1.73	-
3-Dec	11.00	6.00	61.00	-	3.80	2.28	22.80	-	-	0.30	0.18	1.85	-
4-Dec	6.00	5.00	54.00	-	1.90	1.14	19.38	-	-	0.18	0.12	1.61	-
5-Dec	12.86	3.71	38.22	-	1.36	0.52	13.09	-	-	0.28	0.10	1.14	-
6-Dec	7.08	6.20	8.96	-	1.30	1.04	1.70	-	-	0.17	0.17	0.25	-
7-Dec	4.82	5.48	8.44	-	1.20	0.89	1.60	-	-	0.13	0.15	0.24	-
8-Dec	8.97	13.59	12.05	-	1.81	1.59	2.08	-	-	0.23	0.37	0.33	-
9-Dec	6.82	14.31	7.76	-	1.71	4.68	1.94	-	-	0.18	0.42	0.23	-
10-Dec	18.15	17.11	20.74	-	6.14	5.80	7.01	-	-	0.53	0.51	0.62	-
11-Dec	21.70	12.10	17.01	-	6.08	2.33	5.26	-	-	0.60	0.33	0.52	-
12-Dec	10.40	7.98	12.41	-	3.15	2.12	4.07	-	-	0.28	0.23	0.37	-
13-Dec	10.10	6.15	-	-	2.93	1.25	-	-	-	0.28	0.17	-	-
14-Dec	12.60	6.19	-	-	3.23	1.50	-	-	-	0.34	0.17	-	-
15-Dec	4.80	4.68	-	-	1.33	1.12	-	-	-	0.13	0.13	-	-
16-Dec	6.50	3.05	-	-	1.90	0.77	-	-	-	0.17	0.09	-	-
17-Dec	3.20	1.78	-	-	0.53	0.27	-	-	-	0.07	0.05	-	-
18-Dec	2.30	2.48	-	-	0.53	0.52	-	-	-	0.05	0.07	-	-
19-Dec	7.80	4.61	-	-	2.32	1.50	-	-	-	0.21	0.14	-	-
20-Dec	1.91	1.56	-	-	0.71	0.47	-	-	-	0.06	0.05	-	-
21-Dec	2.86	2.18	-	-	0.95	0.58	-	-	-	0.08	0.06	-	-
22-Dec	3.14	1.94	1.38	-	1.14	0.65	0.28	-	-	0.09	0.06	-	-
23-Dec	2.23	2.28	1.97	-	0.45	0.36	0.43	-	-	0.05	0.05	-	-
24-Dec	2.39	1.93	1.70	-	0.84	0.58	0.45	-	-	0.07	0.06	-	-
25-Dec	6.39	2.28	2.22	-	2.39	0.79	0.69	-	-	0.19	0.07	-	-
26-Dec	10.99	2.39	4.37	-	4.09	0.70	0.86	-	-	0.33	0.07	-	-
27-Dec	3.00	1.21	2.62	-	1.08	0.32	0.39	-	-	0.09	0.03	-	-
28-Dec	3.43	1.00	3.28	-	1.23	0.24	0.45	-	-	0.10	0.03	-	-
29-Dec	6.17	1.74	4.36	-	2.17	0.54	0.77	-	-	0.18	0.05	-	-
30-Dec	9.94	2.39	8.21	-	3.50	0.57	1.66	-	-	0.28	0.06	-	-
31-Dec	8.76	0.68	4.79	-	3.08	0.20	1.04	-	-	0.25	0.02	-	-
1-Jan	2.46	1.10	1.85	-	0.76	0.24	0.27	-	1.22	0.07	0.03	-	-
2-Jan	1.97	1.55	2.69	-	0.61	0.39	0.29	-	1.18	0.05	0.04	-	-
3-Jan	2.01	0.25	2.99	-	0.71	0.22	0.28	-	1.52	0.06	0.02	-	-
4-Jan	13.63	1.04	2.96	-	2.99	0.29	0.29	-	1.96	0.35	0.03	-	-
5-Jan	2.65	0.42	2.25	-	0.80	0.12	0.28	-	1.79	0.08	0.00	-	-
6-Jan	2.23	1.05	2.66	-	0.68	0.30	0.32	-	2.21	0.06	0.03	-	-
7-Jan	2.30	1.58	3.32	-	0.83	0.36	0.39	-	3.14	0.07	0.05	-	-

**SWCRR  
GRAVEL OPERATIONS AIR QUALITY MONITORING  
UPDATED MAY 4, 2018**

Substance	TSP (24 hr. avg. max. 100 µg/m³)				PM <sub>2.5</sub> (24 hr. avg. max. 30 µg/m³)					Silica Indicator (12 hr. avg. max. 5 µg/m³)			
Location	A1	A2	A3	A4	A1	A2	A3	A4	CRAZ NW	A1	A2	A3	A4
8-Jan	1.38	1.18	2.41	-	0.36	0.23	0.24	-	9.08	0.04	0.03	-	-
9-Jan	18.55	4.92	11.90	-	6.48	1.82	3.00	-	11.03	0.54	0.15	-	-
10-Jan	6.24	0.54	5.30	-	2.17	0.15	1.20	-	2.02	0.18	0.02	-	-
11-Jan	10.51	0.78	7.90	-	3.99	0.23	1.90	-	9.73	0.32	0.02	-	-
12-Jan	23.04	1.70	11.50	-	8.72	0.55	3.00	-	19.69	0.70	0.05	-	-
13-Jan	5.70	2.28	2.80	-	1.27	0.37	0.30	-	4.55	0.15	0.06	-	-
14-Jan	11.22	4.45	6.30	-	4.25	1.65	1.10	-	4.79	0.34	0.14	-	-
15-Jan	16.70	-	9.90	-	6.28	-	2.30	-	11.59	0.50	-	-	-
16-Jan	5.11	-	3.30	-	1.41	-	0.40	-	3.16	0.14	-	-	-
17-Jan	7.49	-	1.50	-	1.29	-	0.20	-	3.39	0.18	-	-	-
18-Jan	0.24	-	1.70	-	0.06	-	0.20	-	2.17	0.00	-	-	-
19-Jan	0.85	1.14	1.60	-	0.19	0.18	0.20	-	3.34	0.02	0.03	-	-
20-Jan	0.73	0.70	1.60	-	0.13	0.13	0.20	-	2.53	0.01	0.02	-	-
21-Jan	3.01	5.91	2.80	-	0.84	1.56	0.30	-	5.02	0.08	0.15	-	-
22-Jan	2.50	1.25	1.59	-	0.32	0.15	0.53	-	2.06	0.05	0.03	-	-
23-Jan	3.38	5.67	2.58	-	0.82	1.11	0.84	-	4.84	0.08	0.14	-	-

**SWCRR  
GRAVEL OPERATIONS AIR QUALITY MONITORING  
UPDATED MAY 4, 2018**

Substance	TSP (24 hr. avg. max. 100 µg/m³)				PM <sub>2.5</sub> (24 hr. avg. max. 30 µg/m³)					Silica Indicator (12 hr. avg. max. 5 µg/m³)			
Location	A1	A2	A3	A4	A1	A2	A3	A4	CRAZ NW	A1	A2	A3	A4
24-Jan	11.53	10.48	3.63	-	2.81	2.01	1.33	-	10.19	0.29	0.27	-	-
25-Jan	45.50	34.29	20.45	-	17.06	12.39	15.39	-	18.73	1.35	0.99	-	-
26-Jan	31.13	35.35	18.16	-	10.76	11.50	12.39	-	13.60	0.93	1.05	-	-
27-Jan	26.21	29.21	26.00	-	9.89	10.79	11.65	-	13.70	0.79	0.88	-	-
28-Jan	23.56	26.71	11.34	-	8.76	10.01	8.73	-	12.53	0.71	0.79	-	-
29-Jan	2.12	15.90	4.39	-	0.50	4.56	3.03	-	12.96	0.05	0.45	-	-
30-Jan	1.23	9.58	1.69	6.60	0.22	0.95	0.65	2.08	1.85	0.03	0.20	-	0.20
31-Jan	20.57	20.04	8.89	32.79	7.76	7.24	7.13	12.33	11.85	0.62	0.60	-	1.00
1-Feb	27.52	26.58	11.31	34.98	10.12	8.93	7.99	13.13	9.28	0.83	0.78	-	1.06
2-Feb	41.58	38.58	27.00	47.77	15.71	14.18	21.51	17.99	-	1.26	1.16	-	1.45
3-Feb	7.89	15.23	8.82	24.94	2.74	5.53	6.28	9.24	-	0.22	0.45	-	0.76
4-Feb	4.25	7.56	2.76	20.07	1.57	2.75	2.51	7.63	-	0.13	0.23	-	0.61

**SWCRR  
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UPDATED MAY 4, 2018**

Substance	TSP (24 hr. avg. max. 100 µg/m³)				PM <sub>2.5</sub> (24 hr. avg. max. 30 µg/m³)					Silica Indicator (12 hr. avg. max. 5 µg/m³)			
	A1	A2	A3	A4	A1	A2	A3	A4	CRAZ NW	A1	A2	A3	A4
5-Feb	8.00	8.63	2.69	-	2.99	3.14	2.45	-	-	0.24	0.26	-	-
6-Feb	5.81	6.02	2.03	-	2.01	2.14	1.40	-	-	0.17	0.18	-	-
7-Feb	11.75	11.98	3.28	-	4.41	4.34	2.60	-	9.39	0.35	0.36	-	-
8-Feb	5.17	7.02	3.38	-	1.93	2.53	2.46	-	5.58	0.15	0.21	-	-
9-Feb	10.40	10.35	4.68	-	3.93	3.85	3.84	-	10.01	0.32	0.31	-	-
10-Feb	4.90	5.42	1.98	-	1.58	1.73	1.69	-	3.90	0.14	0.15	-	-
11-Feb	3.60	4.25	2.72	-	1.27	1.46	1.42	-	3.22	0.10	0.12	-	-
12-Feb	3.38	3.67	1.68	-	1.03	1.04	1.04	-	5.15	0.10	0.10	-	-
13-Feb	1.21	6.17	1.46	2.00	0.25	0.69	0.63	0.71	1.96	0.03	0.12	-	0.06
14-Feb	2.85	3.71	2.63	-	0.89	1.05	0.97	-	2.12	0.08	0.10	-	-
15-Feb	2.42	17.60	9.08	4.11	0.69	3.72	2.25	1.10	1.73	0.06	0.43	-	0.12
16-Feb	4.46	5.81	1.63	8.25	1.00	1.16	0.81	2.42	1.57	0.11	0.14	-	0.25
17-Feb	2.33	2.94	2.01	-	0.81	0.94	0.91	-	0.75	0.07	0.08	-	-
18-Feb	3.13	2.50	2.44	-	0.87	0.74	0.94	-	0.99	0.08	0.07	-	-
19-Feb	2.97	5.00	2.02	-	0.93	1.56	1.30	-	3.80	0.08	0.14	-	-
20-Feb	5.62	3.92	2.12	-	1.35	1.05	1.54	-	2.97	0.14	0.10	-	-
21-Feb	6.26	17.40	13.02	-	1.41	5.40	3.53	-	4.48	0.16	0.49	0.36	-
22-Feb	3.90	3.63	0.92	6.29	1.01	0.98	0.11	2.31	2.03	0.10	0.10	0.02	0.19
23-Feb	7.56	30.71	4.10	25.02	1.75	5.30	0.89	9.21	4.18	0.17	0.71	0.11	0.76
24-Feb	3.67	5.69	0.38	6.10	0.70	0.76	0.02	2.17	1.63	0.08	0.13	0.01	0.19
25-Feb	1.17	5.94	0.22	5.15	0.29	0.62	0.02	1.84	1.46	0.03	0.12	0.01	0.16
26-Feb	11.46	16.54	3.79	12.49	1.77	1.27	0.50	3.49	3.00	0.26	0.34	0.10	0.38
27-Feb	6.04	13.48	0.43	-	0.74	1.28	0.03	-	2.21	0.11	0.26	0.01	-
28-Feb	6.02	6.88	2.08	-	1.34	1.51	0.31	-	5.12	0.15	0.18	0.06	-

**SWCRR  
GRAVEL OPERATIONS AIR QUALITY MONITORING  
UPDATED MAY 4, 2018**

Substance	TSP (24 hr. avg. max. 100 µg/m³)				PM <sub>2.5</sub> (24 hr. avg. max. 30 µg/m³)				CRAZ NW	Silica Indicator (12 hr. avg. max. 5 µg/m³)			
	A1	A2	A3	A4	A1	A2	A3	A4		A1	A2	A3	A4
1-Mar	12.83	15.50	11.71	-	4.72	5.18	4.00	-	10.69	0.38	0.46	0.35	-
2-Mar	9.50	10.85	1.87	11.75	3.55	3.84	0.53	4.24	-	0.29	0.32	0.05	0.35
3-Mar	5.88	6.77	0.94	7.23	2.16	2.28	0.20	2.49	-	0.18	0.19	0.03	0.22
4-Mar	9.70	11.31	2.17	10.40	3.61	4.06	0.68	3.86	-	0.29	0.34	0.06	0.32
5-Mar	14.19	15.00	4.23	13.85	5.30	5.19	1.06	5.17	-	0.43	0.44	0.13	0.42
6-Mar	26.21	22.60	12.19	20.50	9.53	7.57	2.55	7.66	18.72	0.78	0.66	0.35	0.62
7-Mar	27.27	28.94	13.29	42.11	9.82	9.48	3.11	15.56	18.75	0.81	0.84	0.39	1.28
8-Mar	63.81	67.83	22.10	60.08	24.16	25.21	7.13	22.73	45.10	1.94	2.05	0.66	1.83
9-Mar	10.44	10.46	6.65	8.72	3.13	3.67	2.38	3.08	21.63	0.29	0.31	0.20	0.27
10-Mar	8.04	8.85	3.75	6.67	2.72	2.74	0.84	2.42	7.20	0.23	0.25	0.11	0.20
11-Mar	11.04	15.37	7.87	9.27	3.64	4.33	1.94	3.25	7.37	0.32	0.43	0.23	0.28
12-Mar	6.98	9.60	6.91	5.02	2.12	2.39	1.26	1.68	6.44	0.20	0.26	0.20	0.15
13-Mar	12.85	16.21	9.68	10.15	3.82	3.93	2.03	3.40	7.94	0.36	0.44	0.28	0.31
14-Mar	30.40	35.42	22.56	28.98	10.69	10.71	5.87	10.45	24.68	0.90	1.01	0.67	0.88
15-Mar	41.42	43.92	15.53	43.71	15.68	16.45	5.87	16.53	32.86	1.26	1.33	0.47	1.33
16-Mar	38.20	39.38	14.29	36.21	14.34	14.21	4.92	13.69	24.25	1.16	1.17	0.43	1.10
17-Mar	41.98	43.85	16.54	43.77	15.90	16.51	6.18	16.58	28.49	1.27	1.33	0.50	1.33
18-Mar	17.29	18.13	7.23	17.75	6.56	6.83	2.68	6.74	11.17	0.53	0.55	0.22	0.54
19-Mar	10.18	10.73	5.00	9.57	3.70	3.83	1.54	3.58	8.74	1.41	1.46	0.91	1.16
20-Mar	4.81	8.21	5.49	3.96	1.73	2.26	1.04	1.40	4.93	0.69	1.42	1.29	0.51
21-Mar	21.81	23.13	12.29	21.19	7.75	7.77	3.93	7.82	12.33	2.96	3.10	2.11	2.51
22-Mar	74.04	79.71	29.17	80.92	27.97	29.06	10.23	30.50	27.49	10.50	11.65	4.42	9.98
23-Mar	11.39	17.77	7.00	16.33	4.05	6.55	2.50	6.10	8.90	0.51	1.35	0.45	0.88
24-Mar	4.77	6.50	3.17	2.74	1.44	1.41	0.56	0.80	1.87	1.08	1.38	0.74	0.65
25-Mar	2.35	3.63	1.04	-	0.80	0.98	0.25	-	2.72	0.15	0.31	0.07	-
26-Mar	1.13	3.02	0.27	1.04	0.29	0.40	0.03	0.20	1.97	0.21	0.68	0.06	0.24
27-Mar	4.35	2.67	0.81	14.92	0.77	0.53	0.16	5.62	3.02	1.13	0.54	0.15	3.74
28-Mar	3.79	5.63	2.58	8.81	1.36	1.66	0.83	3.30	5.24	0.59	0.96	0.41	1.08
29-Mar	14.69	19.02	9.48	8.10	5.32	6.50	3.21	3.03	11.30	3.02	4.14	2.31	0.91
30-Mar	-	8.06	1.77	11.13	-	2.96	0.59	4.14	4.31	-	1.12	0.26	1.71
31-Mar	-	8.42	1.83	5.16	-	3.05	0.59	1.89	5.92	-	1.02	0.29	0.55
1-Apr	-	12.69	3.13	-	-	4.39	0.99	-	9.10	-	2.14	0.66	-
2-Apr	15.14	8.90	3.23	3.43	4.99	2.80	0.85	1.19	8.69	3.15	1.14	0.61	0.50
3-Apr	20.38	22.50	11.27	25.53	6.28	6.11	2.60	9.28	11.76	3.60	3.79	2.29	2.11
4-Apr	31.09	39.98	10.31	35.38	10.76	13.67	3.14	13.19	18.10	4.59	4.39	1.77	3.67
5-Apr	9.38	10.63	3.15	9.86	3.10	3.21	0.74	3.60	4.92	0.98	1.14	0.47	0.81
6-Apr	12.06	13.04	5.50	13.83	4.28	4.35	0.86	5.12	8.60	2.05	2.13	1.19	2.17
7-Apr	10.81	12.00	3.15	16.17	4.01	4.27	0.93	6.07	7.73	1.62	1.79	0.55	2.25
8-Apr	13.90	14.73	7.19	-	5.26	5.45	2.57	-	11.66	2.18	2.31	1.40	-
9-Apr	25.13	24.35	15.48	18.26	8.87	8.62	5.24	6.74	17.43	4.96	4.67	3.22	3.63
10-Apr	10.69	14.13	8.42	23.64	3.41	3.77	2.05	8.71	14.30	1.27	2.05	1.43	1.31
11-Apr	21.44	24.02	13.73	-	7.68	8.08	4.59	-	20.17	2.48	2.55	1.83	-
12-Apr	17.52	19.48	8.23	-	6.61	7.23	3.07	-	10.25	2.74	2.88	1.27	-
13-Apr	17.15	16.60	9.67	-	6.10	5.58	3.10	-	9.37	2.81	2.59	1.95	-
14-Apr	8.88	7.77	5.42	13.42	2.35	2.06	1.40	4.82	5.44	1.18	0.61	0.48	0.47
15-Apr	12.54	13.63	8.60	14.65	4.52	4.54	2.88	5.42	10.89	1.49	1.65	1.31	1.49
16-Apr	13.69	14.21	8.23	19.63	5.16	5.27	3.05	7.41	8.60	0.89	0.90	0.64	1.28
17-Apr	22.37	26.21	14.04	24.56	8.01	8.68	4.65	9.29	13.93	3.71	4.26	2.55	3.58
18-Apr	7.63	8.04	4.19	-	2.34	2.36	1.07	-	4.48	0.78	0.82	0.67	-
19-Apr	8.22	9.58	9.44	-	2.22	2.30	2.20	-	6.23	1.31	1.52	1.71	-
20-Apr	7.77	9.17	11.77	5.86	2.02	2.11	2.26	1.89	7.03	1.14	1.31	2.42	0.63
21-Apr	4.92	7.73	3.90	8.08	1.18	1.50	0.99	2.44	5.87	0.71	1.33	0.52	1.62
22-Apr	3.21	2.81	2.46	2.44	0.74	0.65	0.66	0.89	1.38	0.55	0.41	0.35	0.28



**SWCRR**  
**GRAVEL OPERATIONS AIR QUALITY MONITORING**  
**UPDATED MAY 4, 2018**

Substance	TSP (24 hr. avg. max. 100 µg/m³)				PM <sub>2.5</sub> (24 hr. avg. max. 30 µg/m³)					Silica Indicator (12 hr. avg. max. 5 µg/m³)			
	A1	A2	A3	A4	A1	A2	A3	A4	CRAZ NW	A1	A2	A3	A4
23-Apr	6.02	8.92	11.78	4.73	1.45	1.77	2.83	1.57	4.61	0.86	1.49	2.58	0.65
24-Apr	9.65	12.58	6.44	6.54	1.78	1.98	1.27	1.92	6.83	2.06	2.76	1.24	1.23
25-Apr	14.10	13.06	10.54	11.27	4.05	3.99	3.30	4.01	8.92	2.34	1.91	1.55	1.67
26-Apr	14.85	16.13	15.11	9.71	3.51	3.60	3.19	3.25	8.21	2.17	2.20	2.62	1.14
27-Apr	15.77	19.92	16.17	10.31	3.73	4.26	3.44	3.33	10.35	2.36	3.05	2.94	1.29
28-Apr	20.96	21.00	18.15	-	6.32	6.33	5.57	-	11.93	3.32	3.19	2.88	-
29-Apr	10.43	7.58	8.19	-	3.37	2.62	2.92	-	4.49	0.81	0.70	0.81	-
30-Apr	-	10.85	13.02	-	-	3.81	4.31	-	6.55	-	1.65	1.99	-