

Comparison of TSP to Bergerhoff Monitoring of Dust 2012

Berghoff Station #	BGI (TSP) Station #	General Location	Collection Period	Bergerhoff	BGI
				Range = 1.7 - 2.9 mg/(dm ² *d)	TSP Range = 120 µg/m ³
				Deposition Based on Total Fixed Suspended Solids (mg/[dm ² *d])	Avg 24-hr concentration (µg/m ³)
DM1		Up-wind DSTF	Jan 19 - Mar 19	0.5	
DM2		Down-wind Crusher	Jan 19 - Mar 19	1.7	
DM3		Up-wind Crusher	Jan 19 - Mar 19	0.9	
DM4		Down-wind DSTF	Jan 19 - Mar 19	1.4	
DM1		Up-wind DSTF	Mar 19 - July 17	0.9	
DM2		Down-wind Crusher	Mar 19 - July 17	0.3	
DM3		Up-wind Crusher	Mar 19 - July 17	0.4	
DM4		Down-wind DSTF	Mar 19 - July 17	1.1	
DM1		Up-wind DSTF	July 17 - Sept 26	1.3	
DM2		Down-wind Crusher	July 17 - Sept 26	0.9	
DM3		Up-wind Crusher	July 17 - Sept 26	0.8	
DM4		Down-wind DSTF	July 17 - Sept 26	2.4	
DM1		Up-wind DSTF	Sept 26 - Oct 17	4.6	
DM2	TSP-2	Down-wind Crusher	Sept 26 - Oct 17	5.0	<5.56 *
DM3	TSP-1	Up-wind Crusher	Sept 26 - Oct 17	6.3	5.83 *
DM4		Down-wind DSTF	Sept 26 - Oct 17	5.7	
DM1		Up-wind DSTF	Oct 17 - Dec 18	0.3	
DM2	TSP-2	Down-wind Crusher	Oct 17 - Dec 18	11.4	13.61 *
DM3	TSP-1	Up-wind Crusher	Oct 17 - Dec 18	2.2	53.19 *
DM4		Down-wind DSTF	Oct 17 - Dec 18	1.7	
DM1		Up-wind DSTF	Dec 18 - Jan 21	0.7	
DM2	TSP-2	Down-wind Crusher	Dec 18 - Jan 21	18.7	<5.56 *
DM3	TSP-1	Up-wind Crusher	Dec 18 - Jan 21	2.4	<5.56 *
DM4		Down-wind DSTF	Dec 18 - Jan 21	4.5	

*Ave TSP results for samples taken during the Bergerhoff collection period

BGI Omni - Total Suspended Particulate Measurement 2012

Station	Filter ID	Date & Time (start)	Run time (hrs)	Flow (LPM)	Volume (m ³)	TSP (mg)	Avg 24-hr concentration (µg/m ³)
TSP-1	46315	23-Aug-12	24	5.00	7.20	0.073	10.14
TSP-2	46314	23-Aug-12	24	5.00	7.20	0.092	12.78
TSP-1	46312	27-Sep-12	24	5.00	7.20	<0.040	<5.56
TSP-2	47013	27-Sep-12	24	5.00	7.20	<0.040	<5.56
TSP-1	46310	29-Sep-12	24	5.00	7.20	<0.040	<5.56
TSP-2	46311	29-Sep-12	24	5.00	7.20	<0.040	<5.56
TSP-1	47055	16-Oct-12	24	5.00	7.20	0.042	5.83
TSP-1	47058	17-Oct-12	24	5.00	7.20	<0.040	<5.56
TSP-1	47067	23-Oct-12	24	5.00	7.20	0.383	53.19
TSP-1	47059	15-Dec-12	24	5.00	7.20	<0.040	<5.56
TSP-2	47063	15-Dec-12	24	5.00	7.20	0.098	13.61
TSP-1	47071	14-Jan-13	24	5.00	7.20	<0.040	<5.56
TSP-1	47073	16-Jan-13	24	5.00	7.20	<0.040	<5.56
TSP-2	47074	16-Jan-13	24	5.00	7.20	<0.040	<5.56

Yukon Ambient Air Quality Standards

TSP = 120 µg/m³ (24-hr average)

Bergerhoff Dust Monitoring Results 2012

Station #	Collection Period	Days	Surface Area (dm ²)	Deposition Based on Total Fixed Suspended Solids (mg/[dm ² *d])
DM1	Jan 19 - Mar 19	60	1.46	0.5
DM2	Jan 19 - Mar 19	60	1.46	1.7
DM3	Jan 19 - Mar 19	60	1.46	0.9
DM4	Jan 19 - Mar 19	60	1.46	1.4
DM1	Mar 19 - July 17	120	1.46	0.9
DM2	Mar 19 - July 17	120	1.46	0.3
DM3	Mar 19 - July 17	120	1.46	0.4
DM4	Mar 19 - July 17	120	1.46	1.1
DM1	July 17 - Sept 26	71	1.46	1.3
DM2	July 17 - Sept 26	71	1.46	0.9
DM3	July 17 - Sept 26	71	1.46	0.8
DM4	July 17 - Sept 26	71	1.46	2.4
DM1	Sept 26 - Oct 17	21	1.46	4.6
DM2	Sept 26 - Oct 17	21	1.46	5.0
DM3	Sept 26 - Oct 17	21	1.46	6.3
DM4	Sept 26 - Oct 17	21	1.46	5.7
DM1	Oct 17 - Dec 18	62	1.46	0.3
DM2	Oct 17 - Dec 18	62	1.46	11.4
DM3	Oct 17 - Dec 18	62	1.46	2.2
DM4	Oct 17 - Dec 18	62	1.46	1.7
DM1	Dec 18 - Jan 21	34	1.46	0.7
DM2	Dec 18 - Jan 21	34	1.46	18.7
DM3	Dec 18 - Jan 21	34	1.46	2.4
DM4	Dec 18 - Jan 21	34	1.46	4.5

Control Objectives for the Mining, Smelting and Related Industries of BC (1979)

Range = 1.7 - 2.9 mg/(dm²*d)

