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Bass Point Quarry Air Quality Monitoring Data

Reporting Month: May 2016

Licensee Address: Bass Point Tourist Rd, Bass Point NSW 2529

EPL No: 2193

Project Approval: Ref 08_0143, January 28, 2014

Qualifications related to the Air Quality Management Plan

As per the EPL, Project Approval and Air Quality Management Plan, the quarry is required to report on the following:

Particulate Matter

The quarry will gather representative data and compare the results against the following tables:

Table 4: Long-Term Impact Assessment Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion					
Total suspended particulates (TSP)	Annual	^a 90 μg/m ³					
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 μg/m ³					

Table 5: Short Term Impact Assessment Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion					
Particulate matter < 10 µm (PM ₁₀)	24 hour	^а 50 µg/m ³					

Dust Deposition Gauges

The quarry monitors two Dust Deposition Gauges (DDG's) and compares the results against the following table:

Table 6: Long-Term Impact Assessment Criteria for Deposited Dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level					
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month					

Representative Weather Data

The quarry will gather representative weather data for the respective month including temperature, rainfall, wind speed and direction.

Results

Particulate Matter

Short Term Impact Assessment

	DM40 245								
	PM10 24h								
Date	average [µg/m³]								
01/05/2016	<u>[μg/π²]</u> 9.7								
02/05/2016	10.7								
03/05/2016	10.7								
04/05/2016	14.4								
05/05/2016	18.3								
06/05/2016	21.4								
07/05/2016	34.4								
08/05/2016	15.7								
09/05/2016	16.8								
10/05/2016	6.6								
11/05/2016	11.3								
12/05/2016	6.9								
13/05/2016	8.8								
14/05/2016	13.9								
15/05/2016	7.8								
16/05/2016	24.8								
17/05/2016	10.6								
18/05/2016	16.7								
19/05/2016	18.5								
20/05/2016	17.9								
21/05/2016	21.3								
22/05/2016	43.1								
23/05/2016	17.4								
24/05/2016	9								
25/05/2016	16.9								
26/05/2016	7.2								
27/05/2016	8.7								
28/05/2016	6.1								
29/05/2016	5.4								
30/05/2016	8.5								
31/05/2016	7.6								

Dust Deposition Gauges

Location	Result(g/m2/month)	Comment
DDG 1	0.6	
DDG 2	3.1	

Representative Weather Data

		Ten	nps		_		Max	wind	gust) am		3 pm								
Date	Day	Min	Max	Rain	Evap	Sun	Dir	Spd	Time	Temp	RH	Cld	Dir	Spd	MSLP	Temp	RH	Cld	Dir	Spd	MSLP
	ĺ		°C	mm	mm	hours		km/h	local	°C	%	8 th		km/h	hPa	°C	%	8 th		km/h	hPa
1	Su	16.8	27.8	0			NW	54	14:10	21.5	69		N	20		27.5	35		NW	20	
2	Мо	12.2	21.1	0			W	26	02:08	17.1	44		NW	9		19.3	51		NNE	7	
3	Tu	12.2	25.4	0			NW	35	14:03	19.5	45		NW	9		24.6	27		NW	20	
4	We	13.4	23.0	0			SSE	37	14:56	20.0	49		WNW	15		19.3	82		S	30	
5	Th	13.1	21.9	0			N	24	17:28	18.9	50		NNW	2		21.3	51		NE	7	
6	Fr	14.0	24.4	0			WNW	28	03:12	21.5	45		W	9		22.4	49		Е	4	
7	Sa	14.3	23.6	0			N	19	15:53	20.0	65		W	2		22.2	71		NNE	11	
8	Su	17.5	21.1	0			NNE	31	23:57	19.5	82		N	7		20.0	81		N	9	
9	Мо	17.4	20.9	7.6			NNE	52	00:12	18.3	90		NNW	11		20.4	82		NNE	26	
10	Tu	17.1	23.7	0.2			NW	59	12:12	20.6	47		NW	24		22.4	43		WNW	19	
11	We	12.1	19.9	0			W	54	21:29	16.2	42		WNW	13		18.0	43		W	19	
12	Th	14.3	23.4	0			W	61	18:23	19.9	50		WNW	11		21.5	48		W	22	
13	Fr	15.8	25.1	0			WSW	48	02:16	20.6	48		W	19		24.3	36		WNW	13	
14	Sa	15.4	23.8	0			W	28	00:20	19.2	49		SW	6		22.6	56		NE	9	
15	Su	13.6	24.2	0			NW	31	23:14	20.8	52		N	7		21.3	67		NNE	20	
16	Мо	15.9	23.2	0			NNE	44	16:16	20.1	69		WNW	2		21.7	68		NNE	30	
17	Tu	15.4	27.0	0			WNW	48	11:52	19.9	50		NW	7		25.9	27		W	19	
18	We	14.4	20.2	0			W	46	22:08	16.7	46		WNW	11		19.3	51		SSE	9	
19	Th	14.8	22.1	0			WSW	57	08:43	17.4	44		W	35		21.3	36		WNW	20	
20	Fr	15.7	22.0	0			W	39	08:16	19.4	50		W	22		19.4	66		ESE	11	
21	Sa	14.4	20.4	0			NNE	22	17:29	18.3	72		(Calm		19.4	71		NNE	13	
22	Su	15.4	22.7	0			N	20	14:24	19.2	72		N	6		21.4	73		NNE	13	
23	Мо	14.6	24.1	0			W	54	15:47	19.2	67		NNE	6		21.1	24		WSW	30	
24	Tu	12.8	20.5	0			W	33	01:09	15.9	48		WNW	17		20.0	33		WSW	11	
25	We	12.2	19.8	0			W	33	06:15	15.5	45		NNW	19		18.5	47		NE	11	
26	Th	12.6	19.2	0			W	37	22:18	14.3	65		NNW	7		18.7	52		NW	20	
27	Fr	12.3	17.0	0			WSW	63	14:42	14.4	42		W	20		16.1	38		WSW	33	
28	Sa	12.1	14.9	0			W	54	00:17	14.0	61		NW	4		13.9	65		W	13	
29	Su	10.5	18.5	1.4			W	39	01:13	13.4	51		W	24		17.6	37		SW	15	
30	Мо	9.0	17.2	0			WNW	37	01:26	13.9	49		W	11		16.6	58		SSW	20	
31	Tu	12.4	16.2	0			SSW	43	09:02	15.1	75		SSW	17		14.1	92		Е	4	
Statistics for May 2016																					
N	1ean	14.0	21.8							18.1	55			12		20.4	53			16	
Lov	west	9.0	14.9	0						13.4	42		(Calm		13.9	24		Е	4	
Hig	hest	17.5	27.8	7.6			WSW	63		21.5	90		W	35		27.5	92		WSW	33	
	Total			9.2																	