



Licensee: Perilya Broken Hill Limited

Environmental Protection Licenses: 2688 and 2683

Locations: Southern Operations

Blast and Overpressure Monitoring

Method

Blast Monitoring

Blast monitors are located at six “noise sensitive locations” that are either a residential dwelling, school or nursing home nearest to the Southern or Potosi Operations. The monitors have been strategically placed to record vibration peak particle velocity that is measured in mm/sec.

The monitors are routinely calibrated and are compliant with the Australian Standard: AS 2187.2:2006 to ensure the integrity of the data recorded. All monitors record blast data during each blast and is accessible immediately after the blast.

The Southern and Potosi Operations both have a peak particle velocity limit of 10mm/sec. If this is exceeded, it is not to occur for more than five percent of the total number of blasts over each reporting period.

Overpressure

Overpressure is no longer measured at either the Southern Potosi Operations due to all blasting occurring underground and not generating overpressure on the surface that may affect any “noise sensitive locations”.

Overpressure is recorded at Potosi with the use of a microphone attached to the blast monitor. This is measured during the blast and the data is saved on the blast monitor to be downloaded onto Perilya’s computer network for analysis.

The overpressure level must not exceed 130dB for the period 7am to 7pm, and during 7pm to 7am the level must not exceed 110dB.

Blast Monitoring at Potosi

Monitoring frequency required by licence (EPL 2683): During all blasts carried out in or on the premises

Date results received: Immediately following blast

Published on website:

Date	Time (24hr)	Vibration Limit (mm/s)	Vibration Recorded (mm/s)		Overpressure Limit (dB)	Overpressure Recorded (dB)	
			Potosi	Hall St			Hall St
1/05/2012	3:55	10	0.117	<0.19	110	<88	NR
1/05/2012	12:52	10	NR	<0.19	135	NR	NR
1/05/2012	16:39	10	NR	<0.19	135	NR	NR
2/05/2012	4:38	10	NR	<0.19	110	NR	NR
2/05/2012	6:45	10	NR	<0.19	110	NR	NR
3/05/2012	6:45	10	0.278	<0.19	110	91.5	NR
3/05/2012	15:19	10	0.253	<0.19	135	98.8	NR
4/05/2012	4:38	10	0.35	<0.19	110	<88	NR
4/05/2012	6:50	10	0.128	<0.19	110	91.5	NR
5/05/2012	1:51	10	0.328	<0.19	110	94	NR
5/05/2012	11:13	10	0.223	<0.19	135	<88	NR
5/05/2012	17:26	10	0.444	<0.19	135	<88	NR
5/05/2012	22:51	10	0.139	<0.19	110	91.5	NR
6/05/2012	14:06	10	0.607	<0.19	135	91.5	NR
6/05/2012	18:15	10	0.368	<0.19	135	<88	NR
6/05/2012	18:54	10	0.243	<0.19	135	91.5	NR
7/05/2012	6:23	10	0.124	<0.19	110	95.9	NR
7/05/2012	9:42	10	NR	<0.19	135	NR	NR
7/05/2012	15:26	10	NR	<0.19	135	NR	NR
8/05/2012	11:36	10	NR	<0.19	135	NR	NR
8/05/2012	13:04	10	NR	<0.19	135	NR	NR
9/05/2012	7:50	10	0.877	<0.19	135	98.8	NR
9/05/2012	8:23	10	1.25	<0.19	135	98.8	NR
9/05/2012	18:33	10	0.194	<0.19	135	98.8	NR
9/05/2012	22:35	10	0.106	<0.19	110	94	NR
10/05/2012	3:44	10	0.117	<0.19	110	<88	NR
11/05/2012	5:51	10	0.222	<0.19	110	91.5	NR
11/05/2012	6:56	10	0.29	<0.19	110	113.8	NR
11/05/2012	18:25	10	0.508	<0.19	135	108.4	NR
12/05/2012	5:55	10	0.268	<0.2	110	<88	NR
12/05/2012	7:24	10	0.23	<0.2	135	109.9	NR
12/05/2012	9:26	10	0.447	<0.2	135	95.9	NR
12/05/2012	18:57	10	0.113	<0.2	135	<88	NR
13/05/2012	6:46	10	0.23	<0.2	110	109.5	NR
13/05/2012	7:09	10	0.119	<0.2	135	<88	NR
14/05/2012	3:22	10	0.113	<0.2	110	<88	NR
14/05/2012	6:56	10	0.227	<0.2	110	91.5	NR
15/05/2012	16:40	10	NR	<0.2	135	NR	<115
15/05/2012	18:42	10	NR	<0.2	135	NR	<115

Date	Time (24hr)	Vibration Limit (mm/s)	Vibration Recorded (mm/s)		Overpressure Limit (dB)	Overpressure Recorded (dB)	
			Potosi	Hall St			Hall St
16/05/2012	7:19	10	0.371	<0.2	135	91.5	<115
16/05/2012	19:02	10	0.086	<0.2	110	<88	<115
17/05/2012	7:20	10	NR	<0.2	135	NR	<115
17/05/2012	14:41	10	0.208	<0.2	135	106.5	<115
18/05/2012	5:27	10	0.45	<0.2	110	105.5	<115
18/05/2012	7:19	10	0.294	<0.2	135	<88	<115
18/05/2012	21:55	10	0.137	<0.2	110	91.5	<115
19/05/2012	4:19	10	0.087	<0.2	110	<88	<115
19/05/2012	18:45	10	0.226	<0.2	135	<88	<115
20/05/2012	5:23	10	0.385	<0.2	110	<88	<115
20/05/2012	18:54	10	NR	<0.2	135	NR	<115
20/05/2012	19:55	10	0.519	<0.2	110	100	<115
21/05/2012	6:12	10	0.102	<0.2	110	<88	<115
21/05/2012	19:39	10	0.258	<0.2	110	<88	<115
22/05/2012	1:28	10	0.087	<0.2	110	98.8	<115
23/05/2012	18:50	10	0.354	<0.2	135	<88	<115
24/05/2012	19:08	10	0.113	<0.2	110	97.5	<115
24/05/2012	19:39	10	2.32	<0.2	110	95.9	<115
25/05/2012	5:56	10	0.102	<0.2	110	97.5	<115
25/05/2012	8:40	10	0.414	<0.2	135	97.5	<115
25/05/2012	18:22	10	0.169	<0.2	135	<88	<110
26/05/2012	7:00	10	NR	<0.2	135	NR	<110
26/05/2012	7:01	10	0.387	<0.2	135	100	<110
26/05/2012	11:35	10	0.304	<0.2	135	<88	<110
26/05/2012	14:02	10	0.074	<0.2	135	<88	<110
26/05/2012	18:48	10	0.317	<0.2	135	<88	<110
27/05/2012	5:52	10	0.117	<0.2	110	<88	<110
27/05/2012	22:43	10	0.108	<0.2	110	100	<110
28/05/2012	7:38	10	2.05	<0.2	135	98.8	<110
28/05/2012	12:32	10	NR	<0.2	135	NR	<110
29/05/2012	5:13	10	NR	<0.2	110	NR	<110
29/05/2012	17:37	10	0.242	<0.2	135	<88	<110
30/05/2012	6:14	10	NR	<0.2	110	NR	<110
30/05/2012	15:58	10	0.237	<0.2	135	94	<110
30/05/2012	18:39	10	0.163	<0.2	135	<88	<110
31/05/2012	13:11	10	0.142	<0.2	135	98.8	<110

Blast Monitoring at Southern Operations

Monitoring frequency required by licence (EPL 2688): During all blasts carried out in or on the premises

Date results received: Immediately following blast

Published on website:

Date	Time (24hr)	Blast Duration (ms)	Vibration Limit (mm/s)	Vibration (mm/s)			
				Nursing Home	Rainbow Ave	Westside Drive	Gaffney St
2/05/2012	6:48	9050	10	0.33	0.446	0.542	0.595
3/05/2012	6:47	2050	10	<0.2	0.319	0.336	0.23
4/05/2012	19:12	14700	10	0.561	0.569	2.92	2.51
5/05/2012	18:52	15000	10	0.613	0.849	0.804	0.707
7/05/2012	6:50	11700	10	<0.2	0.355	0.737	0.627
8/05/2012	6:47	5350	10	<0.2	<0.2	0.447	0.497
10/05/2012	6:51	5350	10	0.554	0.813	0.589	0.603
10/05/2012	18:59	NR	10	0.34	0.459	<0.2	<0.2
11/05/2012	6:56	11200	10	0.344	0.496	0.352	0.449
13/05/2012	6:56	11250	10	<0.2	<0.2	0.408	0.463
15/05/2012	6:52	3000	10	0.442	0.26	1.11	1.55
15/05/2012	18:51	3300	10	0.38	0.238	<0.2	<0.2
18/05/2012	18:47	13950	10	0.238	<0.2	0.583	1.13
18/05/2012	18:47	2750	10	0.258	0.496	0.64	0.379
22/05/2012	6:46	2750	10	0.443	0.239	<0.2	0.263
22/05/2012	6:46	13700	10	0.443	0.239	<0.2	0.263
23/05/2012	18:53	4450	10	0.488	0.259	0.801	1.86
25/05/2012	6:52	8050	10	<0.2	0.278	0.335	0.407
25/05/2012	6:52	4850	10	<0.2	0.278	0.335	0.407
25/05/2012	18:48	8050	10	0.408	0.294	0.768	1.8
28/05/2012	6:47	9700	10	<0.2	<0.2	0.23	0.251
29/05/2012	18:52	14800	10	0.228	0.397	0.29	0.251
29/05/2012	18:52	4850	10	0.228	0.397	0.29	0.251
31/05/2012	18:58	8900	10	0.43	0.308	0.662	2.07
31/05/2012	18:58	2000	10	0.43	0.308	0.662	2.07

Observations:

No exceedances have been recorded for the month of May 2012.