



Attachment 4.1H - Environmental Monitoring Worksheet

Period: **16/05/2018** - **31/05/2018**

Location	Test	Freq	Limit		Units	Sample Date	NSW Environment Protection Licence Requirement	Date Sample Transferred to Laboratory	Date Sample Results Received by Holcim	Date of Remote Data Download	Result	Comments
			min	max								

Site: **Albion Park Quarry** NRR = No Result Recorded

Environment Protection Licence No.	122
Site Name (As it appears on the licence)	Albion Park Quarry
Site Address (As it appears on the licence)	Albion Park Quarry Woollybutt Drive ALBION PARK RAIL NSW 2527
Link to Licence on EPA Website	http://app.epa.nsw.gov.au/prpoeoapp/ViewPOELicence.aspx?DOCID=54925&SYSUID=1&LICID=122

Water

Point 1	pH	After 90mm rain	6.5	8.5	pH	Y					NRR	
	Oil and Grease	After 90mm rain	0	0	Visible	Y					NRR	
	TSS	After 90mm rain		50	mg/L	Y					NRR	
Point 2	pH	After 90mm rain	6.5	8.5	pH	Y					NRR	
	Oil and Grease	After 90mm rain	0	0	Visible	Y					NRR	
	TSS	After 90mm rain		50	mg/L	Y					NRR	
Point 1	pH	After 90mm rain	6.5	8.5	pH	Y					NRR	
	Oil and Grease	After 90mm rain	0	0	Visible	Y					NRR	
	TSS	After 90mm rain		50	mg/L	Y					NRR	
Point 2	pH	After 90mm rain	6.5	8.5	pH	Y					NRR	
	Oil and Grease	After 90mm rain	0	0	Visible	Y					NRR	
	TSS	After 90mm rain		50	mg/L	Y					NRR	
Point 1	pH	After 90mm rain	6.5	8.5	pH	Y					NRR	
	Oil and Grease	After 90mm rain	0	0	Visible	Y					NRR	
	TSS	After 90mm rain		50	mg/L	Y					NRR	
Point 2	pH	After 90mm rain	6.5	8.5	pH	Y					NRR	
	Oil and Grease	After 90mm rain	0	0	Visible	Y					NRR	
	TSS	After 90mm rain		50	mg/L	Y					NRR	

Air

Point 3	Ash	Monthly		90		Y					NRR	
Point 4	Ash	Monthly		90		Y					NRR	
Point 5	Ash	Monthly		90		Y					NRR	
Point 6	Ash	Monthly		90		Y					NRR	

Blasting **Time of Blast**

	Per Blast		5	mm/s	29/5/18	Y	14:15	29/5/18			0.37	
	Per Blast		115	dB	29/5/18	Y	14:15	29/5/18			102.5	
	Per Blast		5	mm/s		Y					NRR	
	Per Blast		115	dB		Y					NRR	
	Per Blast		5	mm/s		Y					NRR	
	Per Blast		115	dB		Y					NRR	
	Per Blast		5	mm/s		Y					NRR	
	Per Blast		115	dB		Y					NRR	
	Per Blast		5	mm/s		Y					NRR	

Site: **"Johnniefields" Marulan Quarry**

Environment Protection Licence No.	1371
Site Name (As it appears on the licence)	Marulan Quarry
Site Address (As it appears on the licence)	Marulan Quarry Brayton Road MARULAN NSW 2579

Link to Licence on EPA Website

<http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLlicence.aspx?DOCID=32923&SYSUID=1&LICID=1371>

Blasting							Time of Blast				
Underdowns	Overpressure	Per Blast		115	dB		Y				NRR
	Vibration	Per Blast		5	mm/s		Y				NRR
Underdowns	Overpressure	Per Blast		115	dB		Y				NRR
	Vibration	Per Blast		5	mm/s		Y				NRR
Underdowns	Overpressure	Per Blast		115	dB		Y				NRR
	Vibration	Per Blast		5	mm/s		Y				NRR
Underdowns	Overpressure	Per Blast		115	dB		Y				NRR
	Vibration	Per Blast		5	mm/s		Y				NRR
Underdowns	Overpressure	Per Blast		115	dB		Y				NRR
	Vibration	Per Blast		5	mm/s		Y				NRR

Site: Lynwood Quarry

Environment Protection Licence No.

12939

Site Name (As it appears on the licence)

Lynwood Quarry

Site Address (As it appears on the licence)

Lynwood Quarry 278 Stoney Creek Road, MARULAN NSW 2579

Link to Licence on EPA Website

<http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLlicence.aspx?DOCID=105521&SYSUID=1&LICID=12939>

Air											
DD 5	Insoluble Solids	Monthly	0	4	mg/m2/month	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
DD 8	Insoluble Solids	Monthly	0	4	mg/m2/month	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
DD 11	Insoluble Solids	Monthly	0	4	mg/m2/month	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
DD 12	Insoluble Solids	Monthly	0	4	mg/m2/month	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
DD 13	Insoluble Solids	Monthly	0	4	mg/m2/month	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
HVAS 1	PM10	24hr (every 6 days)	0	50	µg/m3	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
HVAS 1	PM10	24hr (every 6 days)	0	50	µg/m3	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
HVAS 1	PM10	24hr (every 6 days)	0	50	µg/m3	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3	0/1/00	Y	12:00:00 AM	12:00:00 AM		NRR

Blasting							Time of Blast				
B1 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B2 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B3 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B3 - Resident	Overpressure	Per Blast	0	115	dB	0/1/00	Y	12:00:00 AM			NRR
B1 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B2 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B3 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B3 - Resident	Overpressure	Per Blast	0	115	dB	0/1/00	Y	12:00:00 AM			NRR
B1 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B2 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B3 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B3 - Resident	Overpressure	Per Blast	0	115	dB	0/1/00	Y	12:00:00 AM			NRR
B1 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B2 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B3 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	0/1/00	Y	12:00:00 AM			NRR
B3 - Resident	Overpressure	Per Blast	0	115	dB	0/1/00	Y	12:00:00 AM			NRR
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	16/05/2018	Y	3:31:00 PM	16/05/2018		0
B4 - Resident	Overpressure	Per Blast	0	115	dB	16/05/2018	Y	3:31:00 PM	16/05/2018		0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	16/05/2018	Y	3:31:00 PM	16/05/2018		0
B5 - Resident	Overpressure	Per Blast	0	115	dB	16/05/2018	Y	3:31:00 PM	16/05/2018		0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	16/05/2018	Y	3:31:00 PM	16/05/2018		1.12
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	16/05/2018	Y	3:31:00 PM	16/05/2018		1.12

B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	17/05/2018	Y	4:44:00 PM	17/05/2018	0
B4 - Resident	Overpressure	Per Blast	0	115	dB	17/05/2018	Y	4:44:00 PM	17/05/2018	0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	17/05/2018	Y	4:44:00 PM	17/05/2018	0
B5 - Resident	Overpressure	Per Blast	0	115	dB	17/05/2018	Y	4:44:00 PM	17/05/2018	0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	17/05/2018	Y	4:44:00 PM	17/05/2018	0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	17/05/2018	Y	4:44:00 PM	17/05/2018	0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	22/05/2018	Y	2:49:00 PM	22/05/2018	0
B4 - Resident	Overpressure	Per Blast	0	115	dB	22/05/2018	Y	2:49:00 PM	22/05/2018	0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	22/05/2018	Y	2:49:00 PM	22/05/2018	0
B5 - Resident	Overpressure	Per Blast	0	115	dB	22/05/2018	Y	2:49:00 PM	22/05/2018	0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	22/05/2018	Y	2:49:00 PM	22/05/2018	0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	22/05/2018	Y	2:49:00 PM	22/05/2018	0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	21/05/2018	Y	3:43:00 PM	21/05/2018	0
B4 - Resident	Overpressure	Per Blast	0	115	dB	21/05/2018	Y	3:43:00 PM	21/05/2018	0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	21/05/2018	Y	3:43:00 PM	21/05/2018	0
B5 - Resident	Overpressure	Per Blast	0	115	dB	21/05/2018	Y	3:43:00 PM	21/05/2018	0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	21/05/2018	Y	3:43:00 PM	21/05/2018	0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	21/05/2018	Y	3:43:00 PM	21/05/2018	0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	25/05/2018	Y	2:36:00 PM	25/05/2018	0
B4 - Resident	Overpressure	Per Blast	0	115	dB	25/05/2018	Y	2:36:00 PM	25/05/2018	0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	25/05/2018	Y	2:36:00 PM	25/05/2018	0
B5 - Resident	Overpressure	Per Blast	0	115	dB	25/05/2018	Y	2:36:00 PM	25/05/2018	0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	25/05/2018	Y	2:36:00 PM	25/05/2018	0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	25/05/2018	Y	2:36:00 PM	25/05/2018	0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	29/05/2018	Y	12:00:00 PM	29/05/2018	0
B4 - Resident	Overpressure	Per Blast	0	115	dB	29/05/2018	Y	12:00:00 PM	29/05/2018	0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	29/05/2018	Y	12:00:00 PM	29/05/2018	0
B5 - Resident	Overpressure	Per Blast	0	115	dB	29/05/2018	Y	12:00:00 PM	29/05/2018	0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	29/05/2018	Y	12:00:00 PM	29/05/2018	0.93
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	29/05/2018	Y	12:00:00 PM	29/05/2018	0.93
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	30/05/2018	Y	2:53:00 PM	30/05/2018	0
B4 - Resident	Overpressure	Per Blast	0	115	dB	30/05/2018	Y	2:53:00 PM	30/05/2018	0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	30/05/2018	Y	2:53:00 PM	30/05/2018	0
B5 - Resident	Overpressure	Per Blast	0	115	dB	30/05/2018	Y	2:53:00 PM	30/05/2018	0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	30/05/2018	Y	2:53:00 PM	30/05/2018	0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	30/05/2018	Y	2:53:00 PM	30/05/2018	0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	31/05/2018	Y	12:51:00 PM	31/05/2018	0
B4 - Resident	Overpressure	Per Blast	0	115	dB	31/05/2018	Y	12:51:00 PM	31/05/2018	0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	31/05/2018	Y	12:51:00 PM	31/05/2018	0
B5 - Resident	Overpressure	Per Blast	0	115	dB	31/05/2018	Y	12:51:00 PM	31/05/2018	0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	31/05/2018	Y	12:51:00 PM	31/05/2018	0.63
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	31/05/2018	Y	12:51:00 PM	31/05/2018	0.63

01/00

Site: Cooma Road Quarry

Environment Protection Licence No.	1453
Site Name (As it appears on the licence)	Cooma Road Quarry
Site Address (As it appears on the licence)	Cooma Road Quarry Cooma Road Queanbeyan NSW 2620
Link to Licence on EPA Website	http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=32932&SYSUID=1&LICID=1453

Water										
Barracks Creek	pH	Monthly	6.5	8.5	pH		Y			NRR
	Total O&G	Monthly	0	10	mg/L		Y			NRR
	Susp. Solids	Monthly	0	50	mg/L		Y			NRR

Blasting											
Time of Blast											
Heffernans House	Overpressure	Per blast	0	115	dB		Y			NRR	No Blasting
	Vibration	Per blast	0	5	mm/s		Y			NRR	

Heffernans House	Overpressure	Per blast	0	115	dB	Y				NRR	
	Vibration	Per blast	0	5	mm/s	Y				NRR	
Heffernans House	Overpressure	Per blast	0	115	dB	Y				NRR	
	Vibration	Per blast	0	5	mm/s	Y				NRR	
Heffernans House	Overpressure	Per blast	0	115	dB	Y				NRR	
	Vibration	Per blast	0	5	mm/s	Y				NRR	

Site: Dubbo Quarry

Environment Protection Licence No.	2212
Site Name (As it appears on the licence)	Dubbo Quarry
Site Address (As it appears on the licence)	Sheraton Road, Dubbo, NSW,2830
Link to Licence on EPA Website	http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=42179&SYSUID=1&LICID=2212

Blasting		Time of Blast										
WARRENS HOUSE	Overpressure	Per blast		120	dB	Y					NRR	no blasting during this reporting period
	Vibration	Per blast		10	mm/s	Y					NRR	
WARRENS HOUSE	Overpressure	Per blast		120	dB	Y					NRR	
	Vibration	Per blast		10	mm/s	Y					NRR	
WARRENS HOUSE	Overpressure	Per blast		120	dB	Y					NRR	
	Vibration	Per blast		10	mm/s	Y					NRR	
WARRENS HOUSE	Overpressure	Per blast		120	dB	Y					NRR	
	Vibration	Per blast		10	mm/s	Y					NRR	

Site: Dunloe Sands Quarry

Environment Protection Licence No.	13077
Site Name (As it appears on the licence)	Dunloe Sands Quarry
Site Address (As it appears on the licence)	Pottsville-Mooball Road, Mooball NSW 2483
Link to Licence on EPA Website	http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=134905&SYSUID=1&LICID=13077

Water - *Frequency is as per 'Special Frequency 1' referred to in Condition M2.3 of EPL												
Silt Pond discharge monitoring point	Discharge pH	<24 hours prior to overflow event*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 1)*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 2)*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 3)*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 4)*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 5)*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge TSS	<24 hours prior to overflow event*	0	50	mg/L	No Discharge	Y				NRR	0
	Discharge TSS	Overflow (Day 1)*	0	50	mg/L	No Discharge	Y				NRR	0
	Discharge TSS	Overflow (Day 2)*	0	50	mg/L	No Discharge	Y				NRR	0
	Discharge TSS	Overflow (Day 3)*	0	50	mg/L	No Discharge	Y				NRR	0
Dredge Pond discharge monitoring point	Discharge TSS	Overflow (Day 4)*	0	50	mg/L	No Discharge	Y				NRR	0
	Discharge TSS	Overflow (Day 5)*	0	50	mg/L	No Discharge	Y				NRR	0
	Oil and Grease	<24 hours prior to overflow event*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
	Oil and Grease	Overflow (Day 1)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
	Oil and Grease	Overflow (Day 2)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
	Oil and Grease	Overflow (Day 3)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
	Oil and Grease	Overflow (Day 4)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
	Oil and Grease	Overflow (Day 5)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
	Discharge pH	<24 hours prior to overflow event*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 1)*	6.5	8.5	pH	No Discharge	Y				NRR	0
Dredge Pond discharge monitoring point	Discharge pH	Overflow (Day 2)*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 3)*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 4)*	6.5	8.5	pH	No Discharge	Y				NRR	0
	Discharge pH	Overflow (Day 5)*	6.5	8.5	pH	No Discharge	Y				NRR	0

0	Discharge pH	Overflow (Day 5)*	6.5	8.5	pH	No Discharge	Y				NRR	0
0	Discharge TSS	<24 hours prior to overflow event*	0	50	mg/L	No Discharge	Y				NRR	0
0	Discharge TSS	Overflow (Day 1)*	0	50	mg/L	No Discharge	Y				NRR	0
0	Discharge TSS	Overflow (Day 2)*	0	50	mg/L	No Discharge	Y				NRR	0
0	Discharge TSS	Overflow (Day 3)*	0	50	mg/L	No Discharge	Y				NRR	0
0	Discharge TSS	Overflow (Day 4)*	0	50	mg/L	No Discharge	Y				NRR	0
0	Discharge TSS	Overflow (Day 5)*	0	50	mg/L	No Discharge	Y				NRR	0
0	Oil and Grease	<24 hours prior to overflow event*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
0	Oil and Grease	Overflow (Day 1)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
0	Oil and Grease	Overflow (Day 2)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
0	Oil and Grease	Overflow (Day 3)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
0	Oil and Grease	Overflow (Day 4)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
0	Oil and Grease	Overflow (Day 5)*	0	0	0=Not Visible; 1=Visible	No Discharge	Y				NRR	0
Groundwater												
DLP1	Ammonia	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Chloride	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	16/05/2018	Y		16/05/2018	28/05/2018	146	0
0	Oil and Grease	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	<5	0
0	pH	Yearly	-	-	pH	16/05/2018	Y		16/05/2018	28/05/2018	4.4	0
0	Standing Water Level	Yearly	-	-	m	16/05/2018	Y		16/05/2018	28/05/2018	1.62	0
0	Sulfate	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
DLP3	Ammonia	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Chloride	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	16/05/2018	Y		16/05/2018	28/05/2018	7670	0
0	Oil and Grease	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	<5	0
0	pH	Yearly	-	-	pH	16/05/2018	Y		16/05/2018	28/05/2018	6	0
0	Standing Water Level	Yearly	-	-	m	16/05/2018	Y		16/05/2018	28/05/2018	1.23	0
0	Sulfate	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
DLP5	Ammonia	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Chloride	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	16/05/2018	Y		16/05/2018	28/05/2018	486	0
0	Oil and Grease	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	<5	0
0	pH	Yearly	-	-	pH	16/05/2018	Y		16/05/2018	28/05/2018	4.8	0
0	Standing Water Level	Yearly	-	-	m	16/05/2018	Y		16/05/2018	28/05/2018	1.36	0
0	Sulfate	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
DLP6	Ammonia	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Chloride	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	16/05/2018	Y		16/05/2018	28/05/2018	469	0
0	Oil and Grease	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	<5	0
0	pH	Yearly	-	-	pH	16/05/2018	Y		16/05/2018	28/05/2018	4	0
0	Standing Water Level	Yearly	-	-	m	16/05/2018	Y		16/05/2018	28/05/2018	1.65	0
0	Sulfate	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
DLP7	Ammonia	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Chloride	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	16/05/2018	Y		16/05/2018	28/05/2018	3480	0
0	Oil and Grease	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	<5	0
0	pH	Yearly	-	-	pH	16/05/2018	Y		16/05/2018	28/05/2018	6.9	0
0	Standing Water Level	Yearly	-	-	m	16/05/2018	Y		16/05/2018	28/05/2018	1.37	0
0	Sulfate	Yearly	-	-	mg/L	16/05/2018	Y		16/05/2018	28/05/2018	NRR	0

Site: Humes - Blacktown

Environment Protection Licence No.	1310
Site Name (As it appears on the licence)	Humes Blacktown
Site Address (As it appears on the licence)	Humes Blacktown Lot 1 Woodstock Ave ROOTY HILL NSW 2766

Link to Licence on EPA Website

<http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=35038&SYSUID=1&LICID=1310>

Water											
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR
Sediment Basin	TSS	Daily During Discharge		50	mg/L		Y				NRR
	pH	Daily During Discharge	6.5	8.5	pH		Y				NRR

Site: Teven Quarry

Environment Protection Licence No.
Site Name (As it appears on the licence)
Site Address (As it appears on the licence)
Link to Licence on EPA Website

3293

Readymix Teven Quarry

Stokers Lane Teven NSW 2478

<http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=85921&SYSUID=1&LICID=3293>

Water											
Time of Blast											
ID #1	pH	Weekly	6.5	8.5	pH	21/5/18	Y				8.3
ID #1	pH	Weekly	6.5	8.5	pH	21/5/18	Y				8.4
ID #1	Oil&Grease	Yearly during discharge (August)	0	10	mg/L		Y				NRR
ID #1	TSS	Yearly during discharge (August)	0	50	mg/L		Y				NRR
Noise											
144 Stokers Lane - Murphy's Residence	dB(A) L Aeq 15 min	Not specified	0	46	dB		Y				NRR

Site: Boambee Quarry

Environment Protection Licence No.
Site Name (As it appears on the licence)
Site Address (As it appears on the licence)
Link to Licence on EPA Website

7094

Boambee Quarry

Boambee Quarry North Boambee Road BOAMBE NSW 2450

<http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=108484&SYSUID=1&LICID=7094>

Blasting (M4 & L2.1 - To determine compliance with L3, measurements to be taken at any point within 1 metre of residential boundary)											
Time of Blast											
Overpressure	Per blast	0	120	dB	23/05/18	Y	0/1/00	23/05/18			97.6 Shot 195
Vibration	Per blast	0	10	mm/s	23/05/18	Y	0/1/00	23/05/18			1.17 Shot 195
Overpressure	Per blast	0	120	dB		Y					NRR

	Vibration	Per blast	0	10	mm/s		Y				NRR
	Overpressure	Per blast	0	120	dB		Y				NRR
	Vibration	Per blast	0	10	mm/s		Y				NRR
	Overpressure	Per blast	0	120	dB		Y				NRR
	Vibration	Per blast	0	10	mm/s		Y				NRR

Site: Tuncurry Sand

Environment Protection Licence No.	13359
Site Name (As it appears on the licence)	Tuncurry Sand Quarry
Site Address (As it appears on the licence)	Tip Road Tuncurry NSW 2428
Link to Licence on EPA Website	http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=47350&SYSUID=1&LICID=13359

Water											
ID#2 Surface H20 "Lake 1"	Arsenic	Quarterly	0		mg/L		Y				NRR
	Conductivity	Quarterly	0		µS/cm		Y				NRR
	Copper	Quarterly	0		mg/L		Y				NRR
	Iron	Quarterly	0		mg/L		Y				NRR
	pH	Quarterly	0		pH		Y				NRR
	Zinc	Quarterly	0		mg/L		Y				NRR
ID#3 Surface H20 "Lake 2"	Arsenic	Quarterly	0		mg/L		Y				NRR
	Conductivity	Quarterly	0		µS/cm		Y				NRR
	Copper	Quarterly	0		mg/L		Y				NRR
	Iron	Quarterly	0		mg/L		Y				NRR
	pH	Quarterly	0		pH		Y				NRR
	Zinc	Quarterly	0		mg/L		Y				NRR
ID#4 Surface H20 "Lake 3"	Arsenic	Quarterly	0		mg/L		Y				NRR
	Conductivity	Quarterly	0		µS/cm		Y				NRR
	Copper	Quarterly	0		mg/L		Y				NRR
	Iron	Quarterly	0		mg/L		Y				NRR
	pH	Quarterly	0		pH		Y				NRR
	Zinc	Quarterly	0		mg/L		Y				NRR
ID#5 Surface H20 "Lake 4"	Arsenic	Quarterly	0		mg/L		Y				NRR
	Conductivity	Quarterly	0		µS/cm		Y				NRR
	Copper	Quarterly	0		mg/L		Y				NRR
	Iron	Quarterly	0		mg/L		Y				NRR
	pH	Quarterly	0		pH		Y				NRR
	Zinc	Quarterly	0		mg/L		Y				NRR

Air											
ID #1	Deposited Matter	Monthly	0	4	g/m2/month		Y				NRR

Site: Jandra Quarry

Environment Protection Licence No.	2796
Site Name (As it appears on the licence)	Jandra Quarry
Site Address (As it appears on the licence)	Pacific Highway Possum Brush NSW 2430
Link to Licence on EPA Website	http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=87197&SYSUID=1&LICID=2796

Water											
ID #1	Discharge pH	Each overflow event	6.5	8.5	pH		Y				NRR
ID #1	Discharge TSS	2 X Daily during discharge	0	50	mg/L		Y				NRR
ID #1	Discharge TSS	2 X Daily during discharge	0	50	mg/L		Y				NRR
ID #1	Discharge Turbidity	2 X Daily during discharge	0		ntu		Y				NRR

ID #1	Discharge Turbidity	2 X Daily during discharge	0		ntu		Y				NRR
ID #1	Discharge pH	Each overflow event	6.5	8.5	pH		Y				NRR
ID #1	Discharge TSS	2 X Daily during discharge	0	50	mg/L		Y				NRR
ID #1	Discharge TSS	2 X Daily during discharge	0	50	mg/L		Y				NRR
ID #1	Discharge Turbidity	2 X Daily during discharge	0		ntu		Y				NRR
ID #1	Discharge Turbidity	2 X Daily during discharge	0		ntu		Y				NRR
ID #1	Discharge pH	Each overflow event	6.5	8.5	pH		Y				NRR
DD 1	Insoluble Solids	Monthly	0	4			Y				NRR
DD 2	Insoluble Solids	Monthly	0	4	mg/m2/month		Y				NRR
DD 3	Insoluble Solids	Monthly	0	4	mg/m2/month		Y				NRR
DD 4	Insoluble Solids	Monthly	0	4	mg/m2/month		Y				NRR
HVAS 1	Insoluble Solids	Monthly	0	4	mg/m2/month		Y				NRR
HVAS 1	PM10	24hr (every 6 days)	0	50	µg/m3	5/8/18	Y	6/5/18	15/06/2018		16
HVAS 1	PM10	24hr (every 6 days)	0	50	µg/m3	14/05/2018	Y	6/5/18	15/06/2018		15
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3	20/05/2018	Y	6/5/18	15/06/2018		28
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3	26/05/2018	Y	6/5/18	15/06/2018		14
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3	6/1/18	Y	6/5/18	15/06/2018		15
Blasting (To determine compliance with L3, measurements to be taken at any point within 1 metre of residential boundary)							Time of Blast				
	Overpressure	Per blast	0	120	dB		Y				NRR
	Vibration	Per blast	0	10	mm/s		Y				NRR
	Overpressure	Per blast	0	120	dB		Y				NRR
	Vibration	Per blast	0	10	mm/s		Y				NRR
	Overpressure	Per blast	0	120	dB		Y				NRR
	Vibration	Per blast	0	10	mm/s		Y				NRR
Annual Blasting Requirements (Calculated each month on a cumulative basis)											
	Overpressure	Monthly (Cumulative)	115	120	dB		Y				NRR
	Vibration	Monthly (Cumulative)	5	10	mm/s		Y				NRR