



Attachment 4.1H - Environmental Monitoring Worksheet

Period: **16/07/2018** - **31/07/2018**

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/ViewPOEOLicence.aspx?DOCID=54925&SYSUID=1&LICID=122

Water

Point	Test	Frequency	Min Limit	Max Limit	Units	Requirement	Transferred	Received	Download	Result	Comments
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	Test	Frequency	Limit	Units	Requirement	Transferred	Received	Download	Result	Comments
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**

Point	Test	Frequency	Min Limit	Max Limit	Units	Requirement	Transferred	Received	Download	Result	Comments
	Per Blast		5		mm/s	Y				0.45	
	Per Blast		115		dB	Y				111.3	
	Per Blast		5		mm/s	Y				0.37	
	Per Blast		115		dB	Y				100.7	
	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	

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/ViewPOEOLicence.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/ViewPOEOLicence.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	17/07/2018	Y	10:17:00 AM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	17/07/2018	Y	10:17:00 AM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	17/07/2018	Y	10:17:00 AM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	17/07/2018	Y	10:17:00 AM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	17/07/2018	Y	10:17:00 AM			0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	17/07/2018	Y	10:17:00 AM			0

B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	18/07/2018	Y	2:11:00 PM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	18/07/2018	Y	2:11:00 PM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	18/07/2018	Y	2:11:00 PM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	18/07/2018	Y	2:11:00 PM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	18/07/2018	Y	2:11:00 PM			0.67
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	18/07/2018	Y	2:11:00 PM			0.67
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	19/07/2018	Y	2:08:00 PM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	19/07/2018	Y	2:08:00 PM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	19/07/2018	Y	2:08:00 PM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	19/07/2018	Y	2:08:00 PM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	19/07/2018	Y	2:08:00 PM			0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	19/07/2018	Y	2:08:00 PM			0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	24/07/2018	Y	12:44:00 PM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	24/07/2018	Y	12:44:00 PM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	24/07/2018	Y	12:44:00 PM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	24/07/2018	Y	12:44:00 PM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	24/07/2018	Y	12:44:00 PM			0.87
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	24/07/2018	Y	12:44:00 PM			0.87
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	25/07/2018	Y	12:53:00 PM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	25/07/2018	Y	12:53:00 PM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	25/07/2018	Y	12:53:00 PM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	25/07/2018	Y	12:53:00 PM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	25/07/2018	Y	12:53:00 PM			0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	25/07/2018	Y	12:53:00 PM			0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	26/07/2018	Y	11:24:00 AM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	26/07/2018	Y	11:24:00 AM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	26/07/2018	Y	11:24:00 AM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	26/07/2018	Y	11:24:00 AM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	26/07/2018	Y	11:24:00 AM			1.52
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	26/07/2018	Y	11:24:00 AM			1.52
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	27/07/2018	Y	2:34:00 PM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	27/07/2018	Y	2:34:00 PM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	27/07/2018	Y	2:34:00 PM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	27/07/2018	Y	2:34:00 PM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	27/07/2018	Y	2:34:00 PM			0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	27/07/2018	Y	2:34:00 PM			0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	30/07/2018	Y	10:50:00 AM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	30/07/2018	Y	10:50:00 AM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	30/07/2018	Y	10:50:00 AM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	30/07/2018	Y	10:50:00 AM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	30/07/2018	Y	10:50:00 AM			0
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	30/07/2018	Y	10:50:00 AM			0
B4 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	31/07/2018	Y	2:24:00 PM			0
B4 - Resident	Overpressure	Per Blast	0	115	dB	31/07/2018	Y	2:24:00 PM			0
B5 - Resident	Peak Particle Velocity	Per Blast	0	5	mm/sec	31/07/2018	Y	2:24:00 PM			0
B5 - Resident	Overpressure	Per Blast	0	115	dB	31/07/2018	Y	2:24:00 PM			0
B6 - Rail	Peak Particle Velocity	Per Blast	0	25	mm/sec	31/07/2018	Y	2:24:00 PM			0.75
B6 - Pipeline	Peak Particle Velocity	Per Blast	0	100	mm/sec	31/07/2018	Y	2:24:00 PM			0.75

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/prpoeapp/ViewPOEOLicence.aspx?DOCID=32932&SYSUID=1&LICID=1453

0	Oil and Grease	Overflow (Day 4)*	0	0	0=Not Visible; 1=Visible	0/1/00	Y				NRR	0	
0	Oil and Grease	Overflow (Day 5)*	0	0	0=Not Visible; 1=Visible	0/1/00	Y				NRR	0	
0	Discharge pH	<24 hours prior to overflow event*	6.5	8.5	pH	0/1/00	Y				NRR	0	
0	Discharge pH	Overflow (Day 1)*	6.5	8.5	pH	0/1/00	Y				NRR	0	
0	Discharge pH	Overflow (Day 2)*	6.5	8.5	pH	0/1/00	Y				NRR	0	
0	Discharge pH	Overflow (Day 3)*	6.5	8.5	pH	0/1/00	Y				NRR	0	
0	Discharge pH	Overflow (Day 4)*	6.5	8.5	pH	0/1/00	Y				NRR	0	
0	Discharge pH	Overflow (Day 5)*	6.5	8.5	pH	0/1/00	Y				NRR	0	
0	Discharge TSS	<24 hours prior to overflow event*	0	50	mg/L	0/1/00	Y				NRR	0	
0	Discharge TSS	Overflow (Day 1)*	0	50	mg/L	0/1/00	Y				NRR	0	
0	Discharge TSS	Overflow (Day 2)*	0	50	mg/L	0/1/00	Y				NRR	0	
0	Discharge TSS	Overflow (Day 3)*	0	50	mg/L	0/1/00	Y				NRR	0	
0	Discharge TSS	Overflow (Day 4)*	0	50	mg/L	0/1/00	Y				NRR	0	
0	Discharge TSS	Overflow (Day 5)*	0	50	mg/L	0/1/00	Y				NRR	0	
0	Oil and Grease	<24 hours prior to overflow event*	0	0	0=Not Visible; 1=Visible	0/1/00	Y				NRR	0	
0	Oil and Grease	Overflow (Day 1)*	0	0	0=Not Visible; 1=Visible	0/1/00	Y				NRR	0	
0	Oil and Grease	Overflow (Day 2)*	0	0	0=Not Visible; 1=Visible	0/1/00	Y				NRR	0	
0	Oil and Grease	Overflow (Day 3)*	0	0	0=Not Visible; 1=Visible	0/1/00	Y				NRR	0	
0	Oil and Grease	Overflow (Day 4)*	0	0	0=Not Visible; 1=Visible	0/1/00	Y				NRR	0	
0	Oil and Grease	Overflow (Day 5)*	0	0	0=Not Visible; 1=Visible	0/1/00	Y				NRR	0	
Groundwater													
DLP1	Ammonia	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Chloride	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Oil and Grease	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	pH	Yearly	-	-	pH	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Standing Water Level	Yearly	-	-	m	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Sulfate	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
DLP2	Ammonia	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Chloride	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Oil and Grease	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	pH	Yearly	-	-	pH	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Standing Water Level	Yearly	-	-	m	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Sulfate	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
DLP3	Ammonia	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Chloride	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Oil and Grease	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	pH	Yearly	-	-	pH	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Standing Water Level	Yearly	-	-	m	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Sulfate	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
DLP5	Ammonia	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Chloride	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Oil and Grease	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	pH	Yearly	-	-	pH	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Standing Water Level	Yearly	-	-	m	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Sulfate	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
DLP6	Ammonia	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Chloride	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Oil and Grease	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	pH	Yearly	-	-	pH	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Standing Water Level	Yearly	-	-	m	0/1/00	Y			0/1/00	0/1/00	NRR	0
0	Sulfate	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0
DLP7	Ammonia	Yearly	-	-	mg/L	0/1/00	Y			0/1/00	0/1/00	NRR	0

0	Chloride	Yearly	-	-	mg/L	0/1/00	Y		0/1/00	0/1/00	NRR	0
0	Electrical conductivity	Yearly	-	-	µm/cm	0/1/00	Y		0/1/00	0/1/00	NRR	0
0	Oil and Grease	Yearly	-	-	mg/L	0/1/00	Y		0/1/00	0/1/00	NRR	0
0	pH	Yearly	-	-	pH	0/1/00	Y		0/1/00	0/1/00	NRR	0
0	Standing Water Level	Yearly	-	-	m	0/1/00	Y		0/1/00	0/1/00	NRR	0
0	Sulfate	Yearly	-	-	mg/L	0/1/00	Y		0/1/00	0/1/00	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	30/7/18	Y				35	
	pH	Daily During Discharge	6.5	8.5	pH	30/7/18	Y				7.12	
Sediment Basin	TSS	Daily During Discharge		50	mg/L	31/7/18	Y				34	
	pH	Daily During Discharge	6.5	8.5	pH	31/7/18	Y				7.76	
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.	3293
Site Name (As it appears on the licence)	Readymix Teven Quarry
Site Address (As it appears on the licence)	Stokers Lane Teven NSW 2478
Link to Licence on EPA Website	http://app.epa.nsw.gov.au/prpoeoapp/ViewPOEOLicence.aspx?DOCID=85921&SYSUID=1&LICID=3293

Blasting												
											Time of Blast	
Licensed Discharge Point	pH	Special Frequency 1	6.5	8.5	pH	18-07-2018	Y	0/1/00	0/1/00	0/1/00	7	NO
Licensed Discharge Point	Oil&Grease	Special Frequency 1	0	1	Visible	18-07-2018	Y	0/1/00	0/1/00	0/1/00	0	
Licensed Discharge Point	TSS	Special Frequency 1	0	50	mg/L	18-07-2018	Y	0/1/00	0/1/00	0/1/00	1	
Licensed Discharge Point	pH	Special Frequency 1	6.5	8.5	pH	21-07-2018	Y	0/1/00	0/1/00	0/1/00	6.6	
Licensed Discharge Point	Oil&Grease	Special Frequency 1	0	1	Visible	21-07-2019	Y	0/1/00	0/1/00	0/1/00	0	
Licensed Discharge Point	TSS	Special Frequency 1	0	50	mg/L	21-07-2020	Y	0/1/00	0/1/00	0/1/00	4	
Licensed Discharge Point	pH	Special Frequency 1	6.5	8.5	pH	0/1/00	Y	0/1/00	0/1/00	0/1/00	NRR	

Site Address (As it appears on the licence)	Boambee Quarry North Boambee Road BOAMBE NSW 2450
Link to Licence on EPA Website	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		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
	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	31/07/18	Y	31/07/18	8/1/18		153
	Copper	Quarterly	0		mg/L		Y				NRR
	Iron	Quarterly	0		mg/L		Y				NRR
	pH	Quarterly	0		pH	31/07/18	Y	31/07/18	8/1/18		7.1
	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	31/07/18	Y	31/07/18	8/1/18		235
	Copper	Quarterly	0		mg/L		Y				NRR
	Iron	Quarterly	0		mg/L		Y				NRR
	pH	Quarterly	0		pH	31/07/18	Y	31/07/18	8/1/18		7
	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	31/07/18	Y	31/07/18	8/1/18		271
	Copper	Quarterly	0		mg/L		Y				NRR
	Iron	Quarterly	0		mg/L		Y				NRR
	pH	Quarterly	0		pH	31/07/18	Y	31/07/18	8/1/18		7.4
	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	31/07/18	Y	31/07/18	8/1/18		337
	Copper	Quarterly	0		mg/L		Y				NRR
	Iron	Quarterly	0		mg/L		Y				NRR
	pH	Quarterly	0		pH	31/07/18	Y	31/07/18	8/1/18		7.4
	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	7/7/18	Y	31/07/18	8/1/18	<2
HVAS 1	PM10	24hr (every 6 days)	0	50	µg/m3	19/07/18	Y	31/07/18	8/1/18	<2
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3	25/07/18	Y	31/07/18	8/1/18	<2
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3		Y			NRR
HVAS 2	PM10	24hr (every 6 days)	0	50	µg/m3		Y			NRR
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