

Environment Protection Licence Monitoring Data - Water



Project Name:	Coffs Harbour Bypass
Monitoring Period:	Mar-25
EPL Number:	21766
Licensee:	Gamuda Berhad and Ferrovial Agroman (Australia) Pty. Ltd.
Premise Address:	Coffs Harbour NSW 2450
Public Register:	https://www.epw.nsw.gov.au/licences/Detail.aspx?unitid=21766&licencenumber=&searchrange=epllicense&range=POCO%20concokeproo&tab=licenue
Relevant EPL Conditions:	L2.4, M2.3, M2.4

Sediment Basins (Type D):															
Discharge Point	Monitoring Point	Date	Turbidity (NTU)		TSS (mg/L)		pH			Oil & Grease		Aluminium (mg/L)	Iron (mg/L)	Conductivity (µS/cm)	Comment
			Results	Licence Limit	Results	Licence Limit	Results	Licence Limit	Results	Licence Limit	Results				
B11000R	1	3/03/2025	50	NA	NA	NA	7.5	nil	NA	NA	NA	NA	NA	NA	
B12400L	1	3/03/2025	11	NA	12	NA	8.3	nil	NA	NA	NA	NA	NA	NA	
B11450R	1	12/03/2025	56	NA	NA	NA	7.6	nil	NA	NA	NA	NA	NA	NA	
B21100L (SB5)	1	12/03/2025	24	NA	NA	NA	8.1	nil	NA	NA	NA	NA	NA	NA	
B20700L (SB1)	1	12/03/2025	30	NA	NA	NA	8.2	nil	NA	NA	NA	NA	NA	NA	
B10700R	1	13/03/2025	9	NA	NA	NA	8.2	nil	NA	NA	NA	NA	NA	NA	
B11450R	1	13/03/2025	45	NA	NA	NA	7.6	nil	NA	NA	NA	NA	NA	NA	
B11000R	1	13/03/2025	49	NA	NA	NA	6.8	nil	NA	NA	NA	NA	NA	NA	
B10700R	1	14/03/2025	5	NA	NA	NA	7.7	nil	NA	NA	NA	NA	NA	NA	
B11450R	1	14/03/2025	55	NA	NA	NA	7.6	nil	NA	NA	NA	NA	NA	NA	
B10700R	1	17/03/2025	12	NA	NA	NA	8.3	nil	NA	NA	NA	NA	NA	NA	
B11000R	1	17/03/2025	24	NA	NA	NA	6.8	nil	NA	NA	NA	NA	NA	NA	
B11450R	1	17/03/2025	55	NA	NA	NA	7.4	nil	NA	NA	NA	NA	NA	NA	
B11600R	1	17/03/2025	27	NA	NA	NA	7.7	nil	NA	NA	NA	NA	NA	NA	
B14500R	1	17/03/2025	55	NA	13	NA	7.3	nil	NA	NA	NA	NA	NA	NA	
B14100L	1	17/03/2025	9	NA	4	NA	8.3	nil	NA	NA	NA	NA	NA	NA	
B15900R	1	17/03/2025	14	NA	4	NA	7.9	nil	NA	NA	NA	NA	NA	NA	
B16100R	1	17/03/2025	14	NA	4	NA	7.2	nil	NA	NA	NA	NA	NA	NA	
B15500R	1	17/03/2025	6	NA	6	NA	8.3	nil	NA	NA	NA	NA	NA	NA	
B16650R	1	17/03/2025	27	NA	NA	NA	7.5	nil	NA	NA	NA	NA	NA	NA	
B16600R	1	17/03/2025	12	NA	NA	NA	7.2	nil	NA	NA	NA	NA	NA	NA	
B18200R	1	17/03/2025	28	NA	NA	NA	8.1	nil	NA	NA	NA	NA	NA	NA	
B20300R	1	17/03/2025	5	NA	NA	NA	7.7	nil	NA	NA	NA	NA	NA	NA	
B20700L (SB1)	1	17/03/2025	55	NA	NA	NA	7.6	nil	NA	NA	NA	NA	NA	NA	
BMC1000	1	17/03/2025	12	NA	NA	NA	8.3	nil	NA	NA	NA	NA	NA	NA	
B11000R	1	18/03/2025	9	NA	2	NA	8.08	nil	NA	NA	NA	NA	NA	NA	
B11450R	1	18/03/2025	16	NA	7	NA	7.56	nil	NA	NA	NA	NA	NA	NA	
B11600R	1	18/03/2025	23	NA	11	NA	7.23	nil	NA	NA	NA	NA	NA	NA	
B13950R	1	19/03/2025	24	NA	NA	NA	7.9	nil	NA	NA	NA	NA	NA	NA	
B18200R	1	19/03/2025	28	NA	NA	NA	8.1	nil	NA	NA	NA	NA	NA	NA	
B11000R	1	21/03/2025	5	NA	3	NA	6.7	nil	NA	NA	NA	NA	NA	NA	
B11450R	1	21/03/2025	40	NA	18	NA	7.6	nil	NA	NA	NA	NA	NA	NA	
B13500R	1	21/03/2025	2	NA	2	NA	7.9	nil	NA	NA	NA	NA	NA	NA	

High Efficiency Sediment Basins (Type B):						
Discharge point	Monitoring Point	Date	Total Suspended Solids (mg/L)	pH	Oil & Grease	Monitoring Frequency
HEB 15000R	4	5/03/2025	11	7.10	nil	Special Frequency 2
HEB 17700R	4	5/03/2025	20	6.40	nil	Special Frequency 2
HEB 15000R	4	6/03/2025	12	7.00	nil	Special Frequency 2
HEB 17700R	4	6/03/2025	22	7.50	nil	Special Frequency 2
HEB 15000R	4	9/03/2025	30	6.50	nil	Special Frequency 2
HEB 17700R	4	9/03/2025	64	7.60	nil	Special Frequency 2
HEB18100R	4	9/03/2025	221	7.00	nil	Special Frequency 2
HEB 18650R	4	9/03/2025	14	7.50	nil	Special Frequency 2
HEB 15000R	4	29/03/2025	12	6.80	nil	Special Frequency 3
HEB 17700R	4	29/03/2025	4	7.40	nil	Special Frequency 4
HEB18100R	4	29/03/2025	9	7.20	nil	Special Frequency 5
HEB 18650R	4	29/03/2025	49	7.50	nil	Special Frequency 6

Water Treatment Plants:																
Discharge point	Monitoring Point	Date	TSS (mg/L)	pH	Oil & Grease	Arsenic (mg/L)	Cadmium (mg/L)	Chromium VI (mg/L)	Chromium III (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)
Shepards S	2	13/03/2025	10	7.2	Nil	<0.012	<0.002	0.027	0	<0.003	<0.003	<0.008	0.004	<0.0001	<0.004	0.004
Gateys N	3	19/03/2025	11	7.5	Nil	<0.012	<0.002	0.022	<0.001	<0.003	0.004	<0.008	0.006	<0.0001	<0.004	<0.002
Shepards S	3	27/03/2025	3	7.6	Nil	<0.012	<0.002	0.031	0.031	<0.003	<0.003	<0.008	0.007	<0.0001	<0.004	0.013

Environment Protection Licence Monitoring Data - Air

Project Name:	Coffs Harbour Bypass
Monitoring Period:	Feb-25
EPL Number:	21766
Licensee:	Gamuda Berhad and Ferrovial Agroman (Australia) Pty. Ltd.
Premise Address:	Coffs Harbour NSW 2450
Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21766&id=21766&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued
Relevant EPL Conditions:	M2.2

Monitoring Point	Start Date	End Date	Date Data Obtained	Solid Particles (g/m ³ /month)	Monitoring Frequency	Rolling Average Criteria	Annual Rolling Average	Comment
DDG1	19/02/2025	19/03/2025	2/04/2025	0.1	Monthly	3.06	1	
DDG2	19/02/2025	19/03/2025	2/04/2025	0.1	Monthly	3.59	3.5	
DDG3	19/02/2025	19/03/2025	2/04/2025	0.19	Monthly	2.68	1.3	
DDG4	19/02/2025	19/03/2025	2/04/2025	0.1	Monthly	3.25	1.2	
DDG5	19/02/2025	19/03/2025	2/04/2025	0.1	Monthly	2.91	0.6	
DDG6	19/02/2025	19/03/2025	2/04/2025	0.1	Monthly	2.84	0.6	
DDG7	19/02/2025	19/03/2025	2/04/2025	0.13	Monthly	2.68	2.1	
DDG8	19/02/2025	19/03/2025	2/04/2025	0.19	Monthly	2.87	0.9	
DDG9	19/02/2025	19/03/2025	2/04/2025	0.1	Monthly	2.19	1.1	
DDG10	19/02/2025	19/03/2025	2/04/2025	0.25	Monthly	2.28	2.1	
DDG10.5	19/02/2025	19/03/2025	2/04/2025	0.09	Monthly	2.28	0.8	
DDG11	19/02/2025	19/03/2025	2/04/2025	0.26	Monthly	2.22	1.6	
DDG11.5	19/02/2025	19/03/2025	2/04/2025	1	Monthly	2.22	1.4	
DDG12	19/02/2025	19/03/2025	2/04/2025	3.2	Monthly	2.43	2.5	
DDG13	19/02/2025	19/03/2025	2/04/2025	2.2	Monthly	2.26	1.4	
DDG14	19/02/2025	19/03/2025	2/04/2025	1.6	Monthly	2.45	1.8	
DDG15	19/02/2025	19/03/2025	2/04/2025	0.97	Monthly	2.83	1	
DDG16	19/02/2025	19/03/2025	2/04/2025	3.7	Monthly	3.59	2.9	

Environment Protection Licence Monitoring Data - Noise



Project Name:	Coffs Harbour Bypass
Monitoring Period:	Mar-25
EPL Number:	21766
Licensee:	Gamuda Berhad and Ferrovial Agroman (Australia) Pty. Ltd.
Premise Address:	Coffs Harbour NSW 2450
Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=21766&id=21766&option=licence&searchrange=licence&range=POEO%20licence&pre=no&status=Issued
Relevant EPL Condition/s:	M4.1 - M4.4

Monitoring Location	NCA	Purpose	Relevant EPL Clause	Works Monitored	Date	Time	Attended or Unattended	Parameter	Goal / Target (dBA)	Measured (dBA)	Esimated Construction Contribution (dBA)	Comment		
On site (approx. 5m inside tunnel)	NA	Spot Check / Verification of Acoustic Doors	P1.2	Tunnelling with hammering in NB tunnel (doors open)	13/03/2024	1:16 PM	Attended	LAeq	NA	89	NA	Data provided to EMM to assess performance of acoustic shed. Initial results from EMM show the following: • The difference between enclosure doors open and closed is about 10 dB. • Most significantly, once the doors are closed, the activities inside the tunnels aren't not clearly audible offsite.		
On site (approx. 10m from doors)						1:21 PM				77				
On site (approx. 20m from doors)						1:41 PM				74				
On site (approx. 5m inside tunnel)						1:48 PM				90				
On site (approx. 10m from doors)						1:37 PM				81				
On site (approx. 20m from doors)						2:02 PM				77				
On site (approx. 10m from doors)				13/03/2024	Tunnelling (without hammering) (doors closed)	10:12 PM				72				
On site (approx. 10m from doors)						Tunnelling with hammering in SB tunnel (doors closed)				10:18 PM			73	
On site (approx. 20m from doors)										10:23 PM			70	
On site (approx. 10m from doors)						14/03/2024				Tunnelling with drilling in SB tunnel (doors closed)			2:05 PM	69
On site (approx. 20m from doors)													2:09 PM	67

Environment Protection Licence Monitoring Data - Vibration



Project Name:	Coffs Harbour Bypass
Monitoring Period:	Mar-25
EPL Number:	21766
Licensee:	Gamuda Berhad and Ferroval Agroman (Australia) Pty. Ltd.
Premise Address:	Coffs Harbour NSW 2450
Public Register:	https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?Instid=21766&id=21766&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued
Relevant EPL Condition/s:	M4.1 - M4.4

Monitoring Location	Purpose	Relevant EPL Clause	Works Monitored	Date	Time	Attended or Unattended	Parameter	Vibration Criteria	Maximum Vibration Measured	Comment
South	Verification Monitoring	M7.7	Earthworks and fill compaction	4/02/2025 - 31/03/25	11:00 AM - 9:00 AM	Unattended	mm/s	4/02/2025 - 31/03/25	0.23 m/s ^{1.75} <7.5 mm/s	Several one-off PPV values were recorded above 7.5mm/s during the monitoring period, but were attributed to non-Project sources such as domestic sources in close proximity to the monitor.

Environment Protection Licence Monitoring Data - Blasting (Tunnels)



Project Name:	CORP Tunnel System
Monitoring Period:	Nov '20
EPC Number:	171100
Licensee:	Geonics Remote and Personnel Agreement (Australia) Pty Ltd
Project Address:	CORP Tunnel, North QLD
Public Register:	https://www.epa.gov.au/public-register/entry/171100
Report EPL Conditions:	171100-4

Tunnel	Partial	Blast Date	Blast Time	7751 Max Aitkhan (dB) - 172 WNR	7755 Max Aitkhan (Borehole Head) (dB)	7755 Max Aitkhan (Borehole Head) (mm/s)	7819 Max Aitkhan (dB) - 84 Gateway Road	7819 Aitkhan (dB) - 1718 Mackays Road	7819 Vibration (mm/s) - 1718 Mackays Road	7737 Aitkhan (dB) - 1717C Mackays Road	7737 Vibration (mm/s) - 1717C Mackays Road	7704 Aitkhan (dB) - 135 Mackays Road	7704 Vibration (mm/s) - 135 Mackays Road	Comments
GAT	N	1/03/2025	9:31	114.5*estimated data based off site assessment & correlated results to dBm.	110.6	0.29	112.2	N/A	N/A	N/A	N/A	N/A	N/A	
GAT	S	1/03/2025	9:38	N/A	N/A	N/A	N/A	102.6	0.09	112.3	N/A	102.9	0.15	
GAT	N	1/03/2025	17:32	113.4*estimated data based off site assessment & correlated results to dBm.	117.9	0.33	111.1	N/A	N/A	N/A	0.49	N/A	N/A	
GAT	N	10/03/2025	16:32	113.4*estimated data based off site assessment & correlated results to dBm.	111.7	1.25	111.1	N/A	N/A	N/A	N/A	N/A	N/A	
GAT	N	16/03/2025	16:53	111.8*estimated data based off site assessment & correlated results to dBm.	111.6	0.39	109.6	N/A	N/A	N/A	N/A	N/A	N/A	
GAT	N	20/03/2025	16:41	91.1*estimated data based off site assessment & correlated results to dBm.	94.6	0.29	97.1	N/A	N/A	N/A	N/A	N/A	N/A	

Tunnel	Partial	Blast Date	Blast Time	7823 Aitkhan (dB) - 1336C Mackays Road	7823 Vibration (mm/s) - 1336C Mackays Road	7853 Aitkhan (dB) - 1337 Mackays Road	7853 Vibration (mm/s) - 1337 Mackays Road	7829 Aitkhan (dB) - 1337 Mackays Road	7829 Vibration (mm/s) - 1337 Mackays Road	Comments
SHEP	N	1/03/2025	11:28	127.1	0.88	126.4	0.46	122.5	0.19	
SHEP	N	6/03/2025	13:51	128	1.76	126.5	0.31	122.3	0.27	
SHEP	N	1/03/2025	7:55	119.7	1.2	119.2	0.3	118	0.22	
SHEP	N	1/03/2025	16:44	122.2	0.87	122.8	0.36	121.8	0.25	
SHEP	N	6/03/2025	17:17	126.1	0.99	122.2	0.5	119.4	0.23	
SHEP	N	7/03/2025	7:29	122.8	1.16	126.5	0.61	127.4	0.33	
SHEP	N	8/03/2025	13:02	126.4	0.99	127.7	0.43	122.2	0.22	
SHEP	N	10/03/2025	12:49	118.4	0.82	120	0.54	122.3	0.22	
SHEP	N	11/03/2025	7:23	116.7	1.9	119.3	0.92	120.2	0.37	
SHEP	N	12/03/2025	7:26	124.1	1.14	126	0.36	127.8	0.3	
SHEP	N	13/03/2025	7:12	120	2.12	121.9	0.8	123.8	0.27	
SHEP	N	13/03/2025	17:30	122.5	0.77	123.5	0.51	124.3	0.23	
SHEP	N	14/03/2025	11:58	121.2	0.93	122.4	0.78	121.9	0.28	
SHEP	N	14/03/2025	17:29	120.5	0.88	120.8	0.61	121.3	0.25	
SHEP	N	15/03/2025	11:57	122.2	0.9	118.4	0.64	117.4	0.28	
SHEP	N	17/03/2025	11:09	118.1	0.61	119.1	0.46	119.2	0.25	
SHEP	N	17/03/2025	7:16	116.6	0.87	120	0.78	120.4	0.34	
SHEP	N	18/03/2025	7:07	123	0.87	125	0.49	124.2	0.24	
SHEP	N	18/03/2025	15:55	120.1	0.51	121.7	0.37	118	0.23	
SHEP	N	18/03/2025	15:14	122.7	0.76	126	0.36	123.3	0.24	
SHEP	N	20/03/2025	9:06	118	0.57	120.5	0.23	119.1	0.19	
SHEP	N	21/03/2025	8:26	122.6	0.58	122.2	0.21	122.6	0.46	
SHEP	N	21/03/2025	17:11	126.4	0.43	127.3	0.28	127.7	0.35	
SHEP	N	22/03/2025	9:05	97.8	0.96	97.2	0.27	96.3	0.52	
SHEP	N	24/03/2025	7:15	122.5	0.83	124.5	0.24	125.4	0.4	
SHEP	N	24/03/2025	7:16	113.3	0.83	116	0.19	114.3	0.28	
SHEP	N	25/03/2025	16:40	123.5	0.14	124.9	0.24	125.1	0.32	
SHEP	N	26/03/2025	7:28	120.2	0.75	119.9	0.33	119.9	0.46	
SHEP	N	27/03/2025	15:22	114.9	0.89	118	0.28	119.3	0.43	
SHEP	N	28/03/2025	7:15	114.7	0.92	116.1	0.25	115.1	0.12	
SHEP	N	28/03/2025	9:08	120.4	0.77	122.8	0.2	122	0.41	

Tunnel	Partial	Blast Date	Blast Time	7726 Aitkhan (dB) - 260 Shephards Lane	7726 Vibration (mm/s) - 260 Shephards Lane	7292 Aitkhan (dB) - 270 Shephards Lane	7292 Vibration (mm/s) - 270 Shephards Lane	7641 Aitkhan (dB) - 266 Shephards Lane	7641 Vibration (mm/s) - 266 Shephards Lane	7726 Aitkhan (dB) - Reverse Drive	7726 Vibration (mm/s) - Reverse Drive	Comments
SHEP	S	1/03/2025	17:26	121.8	0.36	118	0.08	120.2	0.24	118	0.21	
SHEP	S	1/03/2025	7:14	119.8	0.87	121.8	0.31	116.6	0.21	112.9	0.18	
SHEP	S	1/03/2025	7:17	118.7	0.87	124.5	0.32	111.5	0.31	112.5	0.17	
SHEP	S	1/03/2025	14:42	122.2	0.32	121.1	0.22	111.6	0.19	117.1	0.16	
SHEP	S	1/03/2025	7:15	118.1	0.87	121.2	0.31	126.5	0.24	118.1	0.16	
SHEP	S	1/03/2025	7:17	122.1	0.36	120.7	0.25	111.8	0.1	120	0.15	
SHEP	S	7/03/2025	13:28	119	0.36	121.1	0.28	120.5	0.19	121	0.15	
SHEP	S	8/03/2025	9:17	122.5	0.38	120	0.3	115.1	0.22	122.9	0.16	
SHEP	S	10/03/2025	7:39	122.2	0.38	120.4	0.16	120.8	0.19	122.4	0.14	
SHEP	S	10/03/2025	7:31	117.4	0.38	124.5	0.16	120.8	0.19	114.9	0.14	
SHEP	S	10/03/2025	7:39	125.1	0.41	120.4	0.15	114.2	0.24	121	0.22	
SHEP	S	10/03/2025	16:57	118.1	0.39	117	0.17	120.7	0.21	117.9	0.21	
SHEP	S	14/03/2025	7:15	116.6	0.36	121.1	0.31	111.3	0.17	114.7	0.15	
SHEP	S	14/03/2025	7:26	124.1	0.41	120	0.28	120.4	0.24	120.1	0.27	
SHEP	S	17/03/2025	7:11	118.1	0.55	121.6	0.15	120.1	0.22	112.7	0.14	
SHEP	S	17/03/2025	7:14	118.1	0.32	121.1	0.16	114.2	0.17	114.8	0.14	
SHEP	S	18/03/2025	16:59	121.8	0.45	121.9	0.16	121	0.24	119.8	0.1	
SHEP	S	20/03/2025	8:37	125.6	0.45	121.8	0.18	120.1	0.27	121	0.21	
SHEP	S	20/03/2025	8:34	125.6	0.45	121.8	0.18	120.1	0.27	121	0.21	
SHEP	S	20/03/2025	9:05	119	0.48	121.2	0.13	121.9	0.19	121.9	0.27	
SHEP	S	20/03/2025	8:34	126.1	0.34	120.1	0.15	121.1	0.22	121	0.22	
SHEP	S	20/03/2025	8:34	126.1	0.34	120.1	0.15	121.1	0.22	121	0.22	
SHEP	S	20/03/2025	7:29	127.1	0.41	120.4	0.18	118.7	0.22	120.1	0.19	
SHEP	S	24/03/2025	10:29	126.7	0.34	125.5	0.18	121.8	0.24	111.8	0.14	
SHEP	S	27/03/2025	10:22	118.4	0.37	121	0.11	120.4	0.21	110.9	0.15	