

Environment Protection Licence Monitoring Data - Water												COFFS HARBOUR BYPASS	team
Project Name:	Coffs Harbour Bypass												
Monitoring Period:	May-24												
EPL Number:	21766												
Licensee:	Gamuda Behad and Ferrovial Agroman (Australia) Pty. Ltd.												
Premise Address:	Coffs Harbour NSW 2450												
Public Register:	https://open.data.nsw.gov.au/spaces/details.aspx?insid=21766&id=21766&option=license&searchrange=license&range=POC%20license&type=mo&status=Issued												
Relevant EPL Condition/s:	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				
B10700R	1	1/05/2024	32	NA			7.2		nil	NA	NA	NA	
B20300R	1	1/05/2024	26	NA			7.9		nil	NA	NA	NA	
B12250R	1	2/05/2024	22	NA			7.1		nil	NA	NA	NA	
B13600L	1	6/05/2024	2	NA			7.6		nil	NA	NA	NA	
B11600R	1	6/05/2024	28	NA			7.4		nil	NA	NA	NA	
B11000R	1	6/05/2024	30.5	NA			7		nil	NA	NA	NA	
B21050R	1	6/05/2024	8.3	13			7.6		nil	NA	NA	NA	
B21100L	1	6/05/2024	18	15			7.1		nil	NA	NA	NA	
B21100L	1	13/05/2024	32	NA			8.2		nil	NA	NA	NA	
B20300R	1	13/05/2024	50	NA			8		nil	NA	NA	NA	
B21050R	1	13/05/2024	27	NA			7.4		nil	NA	NA	NA	
B10700R	1	13/05/2024	24.9	NA			8.1		nil	NA	NA	NA	
B16650L	1	13/05/2024	50	NA			7.6		nil	NA	NA	NA	
B11000R	1	14/05/2024	21.6	NA			7.6		nil	NA	NA	NA	
B11450R	1	14/05/2024	34.2	NA			7.4		nil	NA	NA	NA	
B10700R	1	14/05/2024	20.1	NA			7.9		nil	NA	NA	NA	
B12600L	1	14/05/2024	12.2	NA			7.8		nil	NA	NA	NA	
B13450L	1	14/05/2024	24.2	NA			7.8		nil	NA	NA	NA	
B18200R	1	14/05/2024	25	NA			7.4		nil	NA	NA	NA	
B20750R	1	14/05/2024	24	NA			8.4		nil	NA	NA	NA	
B16650L	1	14/05/2024	48	NA			7.2		nil	NA	NA	NA	
B16100R	1	15/05/2024	29.2	NA			6.6		nil	NA	NA	NA	
B15500R	1	15/05/2024	59.1	NA			6.71		nil	NA	NA	NA	
B16600R	1	16/05/2024	46.7	NA			6.58		nil	NA	NA	NA	
B14200R	1	16/05/2024	54.5	NA			6.68		nil	NA	NA	NA	
B14100L	1	16/05/2024	14.9	NA			6.6		nil	NA	NA	NA	
B13950R	1	16/05/2024	27.1	NA			6.78		nil	NA	NA	NA	
B13300R	1	16/05/2024	41.6	NA			6.83		nil	NA	NA	NA	
B16100R	1	16/05/2024	32.4	NA			6.53		nil	NA	NA	NA	
B18250R	1	16/05/2024	12.9	NA			7.63		nil	NA	NA	NA	
B11600R	1	16/05/2024	24.6	NA			7.4		nil	NA	NA	NA	
B14100L	1	20/05/2024	19	NA			7		nil	NA	NA	NA	
B16100R	1	20/05/2024	16	NA			6.5		nil	NA	NA	NA	
B16650L	1	21/05/2024	17	NA			7.2		nil	NA	NA	NA	
B11000R	1	22/05/2024	8	NA			7.2		nil	NA	NA	NA	
B11450R	1	22/05/2024	50	NA			7.6		nil	NA	NA	NA	
B14500R	1	24/05/2024	60	NA			7.7		nil	NA	NA	NA	
B18250R	1	27/05/2024	24.8	NA			7.79		nil	NA	NA	NA	
B21050R (S&I)	1	27/05/2024	15.1	NA			7.01		nil	NA	NA	NA	
B20600L	1	31/05/2024	14	NA			7.68		nil	NA	NA	NA	
B21100L (S&I)	1	31/05/2024	6.7	NA			6.99		nil	NA	NA	NA	
B18250R	1	31/05/2024	33.9	NA			8.2		nil	NA	NA	NA	

High Efficiency

Sediment Basins

(Type B):

Discharge Point	Monitoring Point	Date	Total Suspended Solids (mg/L)	pH	Oil & Grease	Monitoring Frequency	Comment
HEB15000R	4	7/05/2024	14	7.2	nil	Special Frequency 2	
HEB17700R	4	7/05/2024	32	7.3	nil	Special Frequency 2	
HEB18100R	4	7/05/2024	72	7.2	nil	Special Frequency 2	
HEB21750L	4	7/05/2024	17	7.1	nil	Special Frequency 2	
HEB15000R	4	9/05/2024	9	7	nil	Special Frequency 2	
HEB17700R	4	9/05/2024	52	7.1	nil	Special Frequency 2	
HEB18100R	4	9/05/2024	57	7.1	nil	Special Frequency 2	
HEB18650R	4	9/05/2024	31	6.8	nil	Special Frequency 2	
HEB21750L	4	9/05/2024	10	6.8	nil	Special Frequency 2	

Water Treatment Plants:

Discharge Point	Monitoring Point	Date Sampled	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)	Monitoring Frequency	Comment
			50	6.5 to 8.5	None Visible	0.05	0.014	0.07	0.16	0.04	1.5	0.03	2.5	0.0007	0.2	0.15	N/A	N/A
GWTP-1	3	5/02/2024	10	7.53	None	<0.001	<0.001	0.038	<0.001	<0.001	0.008	<0.001	0.034	<0.0005	0.001	0.008	Special Frequency 1	
GWTP-1	3	5/02/2024	10	7.51	None	<0.001	<0.001	0.04	<0.001	<0.001	0.008	<0.001	0.037	<0.0005	0.001	0.011	Special Frequency 1	
GWTP-1	3	5/02/2024	<5	6.9	None	<0.001	<0.0001	0.039	<0.001	<0.001	0.005	<0.001	0.037	<0.0001	0.001	<0.005	Special Frequency 1	
GWTP-1	3	5/30/2024	33	7.37	None	<0.001	<0.001	0.046	0.001	<0.001	0.02	<0.001	0.036	<0.0005	0.001	0.052	Special Frequency 1	
GWTP-1	3	5/30/2024	13	7.22	None	<0.001	<0.001	0.046	0	<0.001	0.01	<0.001	0.033	<0.0005	0.001	0.004	Special Frequency 1	
GWTP-1	3	5/30/2024	6	6.9	None	<0.001	<0.001	0.044	0.002	<0.001	<0.005	<0.001	0.034	<0.0001	0.001	<0.005	Special Frequency 1	

Environment Protection Licence Monitoring Data - Air

COFFS
HARBOUR
BYPASS

team

Project Name:

Monitoring Period:

EPL Number:

Licensee:

Premise Address:

Public Register:

Relevant EPL Condition/s:

Coffs Harbour Bypass

May-24

21766

Ganuda Berhad and Ferrovial Agroman (Australia) Pty. Ltd.

Coffs Harbour NSW 2450

<https://apps.epa.nsw.gov.au/prpoeoapp/Detail.aspx?insid=21766&id=21766&option=licence&searchrange=licence&range=POEO%20licence&pr=no&status=issued>

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	23/04/2024	27/05/2024	11/06/2024	0.9	Monthly	3.06	1.6	
DDG2	23/04/2024	27/05/2024	11/06/2024	5.4	Monthly	3.59	4	FGJV Earthworks occurring at ERI (near gauge). General traffic may have also contributed to monthly exceedance.
DDG3	23/04/2024	27/05/2024	11/06/2024	0.1	Monthly	2.68	0.7	
DDG4	23/04/2024	27/05/2024	11/06/2024	2	Monthly	3.25	1.9	
DDG5	23/04/2024	27/05/2024	11/06/2024	0.7	Monthly	2.91	0.5	
DDG6	23/04/2024	27/05/2024	11/06/2024	2.6	Monthly	2.84	0.5	
DDG7	23/04/2024	27/05/2024	11/06/2024	3.7	Monthly	2.68	0.7	FGJV Earthworks and portal works occurring near gauge.
DDG8	23/04/2024	27/05/2024	11/06/2024	1.6	Monthly	2.87	2.0	
DDG9	23/04/2024	27/05/2024	11/06/2024	1.2	Monthly	2.19	0.8	
DDG10	23/04/2024	27/05/2024	11/06/2024	1.8	Monthly	2.28	1.9	
DDG10.5	23/04/2024	27/05/2024	11/06/2024	1	Monthly	2.28	1.7	
DDG11	23/04/2024	27/05/2024	11/06/2024	0.9	Monthly	2.22	1.8	
DDG11.5	23/04/2024	27/05/2024	11/06/2024	1.3	Monthly	2.22	1.7	
DDG12	23/04/2024	27/05/2024	11/06/2024	1.4	Monthly	2.43	0.8	
DDG13	23/04/2024	27/05/2024	11/06/2024	1.1	Monthly	2.26	1.7	
DDG14	23/04/2024	27/05/2024	11/06/2024	2.4	Monthly	2.45	0.9	
DDG15	23/04/2024	27/05/2024	11/06/2024	1.8	Monthly	2.83	0.8	
DDG16	23/04/2024	27/05/2024	11/06/2024	0	Monthly	2.68	2	

Environment Protection Licence Monitoring Data - Noise



Project Name:	Coffs Harbour Bypass
Monitoring Period:	May-24
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/prpoeapps/Detail.aspx?nslid=21766&id=21766&option=licence&searchrange=licence&range=POEO%20licence&prp-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)	Estimated Construction Contribution (dBA)	Comment
Gatelys North Portal (~45m from source)	19	Spot Check	P1.2	Tunnel fans NB + SB at 70% load	8/05/2024	12:31 PM	Attended	L _{Aeq}	NA	65	65	Construction contribution pulled from 190 due to nature of noise source. SWL of 106 dBA calculated based on SPL of 65dBA at ~45m away.
Gatelys North Portal (~40m from source)	19	Spot Check	P1.2	Tunnel fans NB + SB at 70% load with insulated container as mitigation	8/05/2024	3:06 PM	Attended	L _{Aeq}	NA	61	61	Construction contribution pulled from 190 due to nature of noise source. SWL of 102 dBA calculated based on SPL of 61dBA at ~40m away.
Bridge 3 (approx. 125m from works)	7	Verification of New Activity	P1.2	Bridge girder installation	21/05/2024	11:52 AM	Attended	L _{Aeq} 15min	55	58	55	Recorded level in line with prediction. During monitoring, dominant noise source was earthworks operations occurring south of the bridge works.

Environment Protection Licence Monitoring Data - Blasting (Tunnels)

Project Name: Coffs Harbour Bypass
Monitoring Period: May-24
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/proposals/Detail.aspx?instid=21766&id=21766&option=licence&searchrange=licence&range=POFO%20licence&prp=no&status=issued>
Relevant EPL Condition: L5.1-L5.4

Blast Location	Date	Time	Monitoring Location	Vibration Limit (mm/s)	Ground Vibration Result (mm/s)	Airblast Overpressure Limit (dB(L))	Airblast Overpressure Result (dB(L))	Comments
Gateys North Portal - SB	5/01/2024	11:22	172 West Korora Road	5	0.35	115	121.5	Airblast exceedance of limit 1 recorded at 94 Gateys Road. Airblast exceedance of limit 2 recorded at 172 West Korora Road and 84 Gateys Road.
			94 Gateys Road	5	0.48	115	115.7	
			84 Gateys Road	5	0.43	115	120.2	
Gateys North Portal - NB	5/06/2024	17:24	172 West Korora Road	5	0.21	115	115	Airblast exceedance of limit 1 recorded at 94 Gateys Road and 84 Gateys Road.
			94 Gateys Road	5	0.44	115	117.1	
			84 Gateys Road	5	0.26	115	117.3	
Gateys North Portal - NB	5/09/2024	17:34	172 West Korora Road	5	0.29	115	120.1	Airblast exceedance of limit 2 recorded at 172 West Korora Road. Exceedance of limit 1 recorded at 84 Gateys Road.
			94 Gateys Road	5	0.87	115	90.4	
			84 Gateys Road	5	0.45	115	116.6	
Gateys North Portal - SB	5/10/2024	12:34	172 West Korora Road	5	0.29	115	115.2	Airblast exceedance of limit 1 recorded at 172 West Korora Road and 84 Gateys Road.
			94 Gateys Road	5	0.41	115	96.3	
			84 Gateys Road	5	0.78	115	116.7	
Gateys North Portal - SB	5/14/2024	11:00	172 West Korora Road	5	0.27	115	120.9	Airblast exceedance of limit 2 recorded at 172 West Korora Road. Exceedance of limit 1 recorded at 84 Gateys Road.
			94 Gateys Road	5	0.46	115	101.7	
			84 Gateys Road	5	0.45	115	116.7	
Gateys North Portal - SB	5/15/2024	7:12	172 West Korora Road	5	0.25	115	115.4	Airblast exceedance of limit 1 recorded at 172 West Korora Road.
			94 Gateys Road	5	0.94	115	95	
			84 Gateys Road	5	0.39	115	111.6	
Gateys North Portal - NB	5/16/2024	11:02	172 West Korora Road	5	0.25	115	116.8	Airblast exceedance of limit 1 recorded at 172 West Korora Road.
			94 Gateys Road	5	0.1	115	95	
			84 Gateys Road	5	0.09	115	90.3	
Gateys North Portal - SB	5/16/2024	17:37	172 West Korora Road	5	0.21	115	118	Airblast exceedance of limit 1 recorded at 172 West Korora Road and 84 Gateys Road.
			94 Gateys Road	5	0.57	115	100.3	
			84 Gateys Road	5	0.39	115	118.3	
Gateys North Portal - NB	5/17/2024	14:08	172 West Korora Road	5	0.25	115	117	Airblast exceedance of limit 1 recorded at 172 West Korora Road.
			94 Gateys Road	5	0.43	115	98.5	
			84 Gateys Road	5	0.27	115	111.3	
Gateys North Portal - SB	5/20/2024	12:04	172 West Korora Road	5	0.26	115	117.4	Airblast exceedance of limit 1 recorded at 172 West Korora Road and 84 Gateys Road.
			94 Gateys Road	5	1.28	115	101	
			84 Gateys Road	5	0.71	115	116	
Gateys North Portal - NB	5/21/2024	7:01	172 West Korora Road	5	0.38	115	114.7	Compliant. Monitor at 84 Gateys did not trigger (low result).
			94 Gateys Road	5	2.52	115	97.5	
			84 Gateys Road	5	DNT	115	DNT	
Gateys North Portal - SB	5/22/2024	11:03	172 West Korora Road	5	0.25	115	116.8	Airblast exceedance of limit 1 recorded at 172 West Korora Road.
			94 Gateys Road	5	0.55	115	98.5	
			84 Gateys Road	5	0.35	115	114	
Gateys North Portal - NB	5/23/2024	7:44	172 West Korora Road	5	0.35	115	115	Compliant.
			94 Gateys Road	5	2.68	115	97.5	
			84 Gateys Road	5	0.35	115	112.4	
Gateys North Portal - SB	5/23/2024	15:55	172 West Korora Road	5	0.25	115	117.2	Airblast exceedance of limit 1 recorded at 172 West Korora Road and 84 Gateys Road.
			94 Gateys Road	5	0.88	115	101	
			84 Gateys Road	5	0.35	115	116.1	
Gateys North Portal - SB	5/27/2024	2:14	172 West Korora Road	5	0.25	115	117.1	Airblast exceedance of limit 1 recorded at 172 West Korora Road and 84 Gateys Road. Monitoring undertaken at 31A Gateys Road in response to resident concern over blast vibrations. Airblast and vibration compliant.
			94 Gateys Road	5	0.84	115	102.4	
			84 Gateys Road	5	0.29	115	117.4	
			31A Gateys Road	5	0.16	115	108	
Gateys North Portal - NB	5/28/2024	12:29	172 West Korora Road	5	0.38	115	121.9	Airblast exceedance of limit 2 recorded at 172 West Korora Road. Monitoring undertaken at 31A Gateys Road in response to resident concern over blast vibrations. Airblast and vibration compliant.
			94 Gateys Road	5	2.15	115	103	
			84 Gateys Road	5	0.69	115	117.5	
			31A Gateys Road	5	0.14	115	106	
Gateys North Portal - SB	5/29/2024	7:09	172 West Korora Road	5	0.25	115	113.8	Compliant.
			94 Gateys Road	5	1.25	115	98.5	
			84 Gateys Road	5	0.36	115	112.3	
			31A Gateys Road	5	0.07	115	83	
Gateys North Portal - NB	5/30/2024	15:26	172 West Korora Road	5	0.32	115	116.3	Airblast exceedance of limit 1 recorded at 172 West Korora Road and 84 Gateys Road.
			94 Gateys Road	5	2.6	115	103.5	
			84 Gateys Road	5	0.78	115	115.7	
Gateys North Portal - SB	5/31/2024	7:57	172 West Korora Road	5	0.25	115	115.6	Airblast exceedances of limit 1 recorded at 172 West Korora Road.
			94 Gateys Road	5	0.94	115	97.5	
			84 Gateys Road	5	0.19	115	111.9	

Environment Protection Licence Monitoring Data - Blasting (Civil)

Project Name: Coffs Harbour Bypass
Monitoring Period: May-24
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?mstid=21766&id=21766&option=licence&searchrange=licence&range=POE%20licence&prp=no&status=issued>
Relevant EPL Condition/s: L5.1-L5.4

Blast Location	Blast Ref	Date	Time	Monitoring Location	Vibration Limit (mm/s)	Ground Vibration Result (mm/s)	Airblast Overpressure Limit (dBL)	Airblast Overpressure Result (dBL)	Comments
Cut 4	Blast 18	5/02/2024	2:30PM	52 Buchanans Road	10	4.67	125	113.2	Compliant.
				56 Buchanans Road	5	6.44	120	116.1	Compliant.
				60 Buchanans Road	5	4.87	120	111.2	Compliant.
Cut 16	Blast 18	5/03/2024	2:15 PM	53 Bruxner Park Road	5	2.472	120	107.50	Compliant.
				15 Bruxner Park Road	5	4.825	120	97.70	Compliant.
				108 West Korora Road	10	4.214	125	115.70	Compliant.
Cut 4	Blast 19	5/14/2024	2:30PM	52 Buchanans Road	10	4.99	125	104.90	Compliant.
				56 Buchanans Road	5	4.63	120	112.40	Compliant.
				60 Buchanans Road	5	DNT	120	DNT	Monitor did not trigger.
Cut 16	Blast 19	5/17/2024	2:15 PM	53 Bruxner Park Road	5	2.290	120	103.5	Compliant.
				15 Bruxner Park Road	5	2.244	120	106.6	Compliant.
				108 West Korora Road	10	6.003	125	119.3	Compliant.
Cut 4	Blast 20	5/21/2024	2:30 PM	52 Buchanans Road	10	5.26	125	106.80	Compliant.
				56 Buchanans Road	5	3.78	120	121.70	Compliant.
				60 Buchanans Road	5	4.61	120	115.40	Compliant.
Cut 5B	Blast 3	5/29/2024	2:43PM	15 Nelson St	25	3.25	125	113.10	Compliant.
				353C Coramba Rd	15	2.10	125	103.30	Compliant.
				52 Buchanans Road	25	1.41	125	84.90	Compliant.
				12 Nelson Street	10	3.72	125	110.10	Compliant.
				21 Nelson Street	25	4.99	125	105.70	Compliant.
				26 Nelson Street	15	1.90	125	107.70	Compliant.
Cut 16	Blast 20	5/31/2024	2:15 PM	15A Nelson Street	25	4.17	125	117.10	Compliant.
				53 Bruxner Park Road	5	4.216	125	112.30	Compliant.
				15 Bruxner Park Road	5	3.994	125	114.40	Compliant.
				108 West Korora Road	10	3.609	125	117.40	Compliant.