## Environment Protection Licence Monitoring Data - Air

COFFS HARBOUR team

Project Name: Monitoring Period: EPL Number: Licensee: Premise Address: Public Register: Relevant EPL Condition/s:

Coffs Harbour Bypass Nov-23 21766 Gamuda Berhad and Ferrovial Agroman (Australia) Pty. Ltd. Coffs Harbour NSW 2450 https://apps.ega.nsw.gov.au/prpocoapp/Detail.aspx?instid=21768&id=21768&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued M2.2

Monitoring Point	Start Date	End Date	Date Data Obtained	Solid Particles (g/m <sup>2</sup> /month)	Monitoring Frequency	Annual Rolling Average(g/m2/month)	Criteria (g/m2/month)	Comment
DDG1	10/25/2023	11/23/2023	12/1/2023	17.8	Monthly	1.3	3.06	Error in dust results for November 2023. Unrealisticity high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Bypass (240mm of rain in the monitoring period). Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 month rolling average.
DDG2	10/25/2023	11/23/2023	12/1/2023	29.8	Monthly	5.1	3.59	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harborn Spass (240mm of rain in the monitoring period), Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were leveer throughout the monitory period when compared to periodia months. Advice from the laboratory is that the results are very unsult, sample are appeared and the standard strategies and the standard strategies and the standard strategies appeared there, however the data has been excluded from the 12 month rolling average.
DDG3	10/25/2023	11/23/2023	12/1/2023	7.6	Monthly	0.9	2.68	Error in dust results for November 2023. Unrealisticly high results detected across the Project. adjament for the wettest month on reacod for construction of the Coff shadour Bysass (240mm of rain in the monitoring period). Reatiline Total Suspend Particulate monitors used on the Project confirm TSP levels were clearer throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unsusul, samples appeared clear and free of targe amounts of a suspended seitiment. Solid Particle results are reported here, however the data has been excluded from the 12 month rolling average.
DDG4	10/25/2023	11/23/2023	12/1/2023	26.6	Monthly	2.4	3.25	Error in dust results for November 2023. Unrealisticly high results detected across the Project. adjament for the wettest month on reacod for construction of the Coff shadour Bysass (240mm of rain in the monitoring period). Reatiline Total Suspend Particulate monitors used on the Project confirm TSP levels were clearer throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unsusul, samples appeared clear and free of targe amounts of a suspended seitiment. Solid Particle results are reported here, however the data has been excluded from the 12 month rolling average.
DDG5	10/25/2023	11/23/2023	12/1/2023	2.1	Monthly	0.5	2.91	Error in dust results for November 2023. Unrealisticly high results detected across the Project. adjament for the wettest month on reacod for construction of the Coff shadour Bysass (240mm of rain in the monitoring period). Reatiline Total Suspend Particulate monitors used on the Project confirm TSP levels were clearer throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples opported harm off the of fragments of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 month rolling average.
DDG6	10/25/2023	11/23/2023	12/1/2023	3.8	Monthly	0.7	2.84	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbord Spass (240mm of rain in the monitoring period), Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitory period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended satisfiered. Solid Particle results are reported here, however the data has been excluded from the 12 monitor heling average.
DDG7	10/25/2023	11/23/2023	12/1/2023	1.1	Monthly	1.7	2.68	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Spass (240mm of rain in the monitoring period), Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 monitor heling average.
DDG8	10/25/2023	11/23/2023	12/1/2023	3	Monthly	3	2.87	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Spaas (240mm of rain in the monitoring period), Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 monitor holing average.
DDG9	10/25/2023	11/23/2023	12/1/2023	0	Monthly	0.7	2.19	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Bypass (240mm of rain in the monitoring period), Realime Total Suppend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 month eiting average.
DDG10	10/25/2023	11/23/2023	12/1/2023	18.7	Monthly	2.1	2.28	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Bypass (240mm or rain in the monitoring period), Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 monitor heling average.
DDG11	10/25/2023	11/23/2023	12/1/2023	10.6	Monthly	1.9	2.22	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Bypass (240mm or rain in the monitoring period), Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 monitor heling average.
DDG12	10/25/2023	11/23/2023	12/1/2023	18	Monthly	1.1	2.43	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Bypass (240mm or rain in the monitoring period), Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 monitor heling average.
DDG13	10/25/2023	11/23/2023	12/1/2023	6.2	Monthly	1.1	2.26	Error in dust results for November 2023. Unrealisticity high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Bypass (240mm of rain in the montisring period), Realime Total Suspend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suspended sediment. Sold Particle results are reported here, however the data has been excluded from the 12 month elling average.
DDG14	10/25/2023	11/23/2023	12/1/2023	8.8	Monthly	0.8	2.45	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbourd Bypass (240mm or rain in the monitoring period), Realime Total Suppend Particulate monitors used on the Project confirm TSP levels were lower throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of large amounts of suppended sadiment. Sold Particle results are reported here, however the data has been excluded from the 12 monitor lealing average.
DDG15	10/25/2023	11/23/2023	12/1/2023	2.2	Monthly	0.4	2.83	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbour Bypass (240mm or rain in the monitoring period), Realime Total Supend Particulate monitors used on the Project confirm TSP levels were leveer throughout the monitoring period when compared to previous months. Advice from the laboratory is that the results are very unusual, samplese appeared clear and free of large amounts of suspended saminers. Sold Particle results are very negotation that however the data has been excluded from the 12 month rolling average.
DDG16	10/25/2023	11/23/2023	12/1/2023	3.3	Monthly	1	3.59	Error in dust results for November 2023. Unrealisticly high results detected across the Project alignment for the wettest month on record for construction of the Coffs Harbour Spass (240mm of rain h to finne roll by a set of the construction of the Coffs Harbour of the coffs and the construction of the set of the construction of the coffs and the construction of the previous months. Advice from the laboratory is that the results are very unusual, samples appeared clear and free of targe amounts of suspended sediment. Solid Particle results are reported here, however the data has been excluded from the 12 month rolling average.

Environment Protection Licence Monitoring Data - Blasting													
Project Name: Monitoring Period: EPL Number: Licensee: Premise Address: Public Register: Relevant EPL Condition/s:													
Blast Location	Date	Time	Monitoring Location	Vibration Limit (mm/s)	Ground Vibration Result (mm/s)	Airblast Overpressure Limit (dBL)	Airblast Overpressure Result (dBL)	Comments					
		14:30	52 Buchanans Road	10	5.15	125	114.4	Compliant.					
Cut 4	11/7/2023		56 Buchanans Road	10	6.98	125	112	Compliant.					
			60 Buchanans Road	10	2.64	125	109.3	Compliant.					
			53 Bruxner Park Road	10	4.974	125	114.4	Compliant.					
Cut 16	11/9/2023	14:15	15 Bruxner Park Road	10	4.913	125	98.2	Compliant.					
			108 West Korora Rd	10	1.576	125	113.2	Compliant.					
			53 Bruxner Park Road	10	3.682	125	114	Compliant.					
Cut 16	11/16/2023	14:15	15 Bruxner Park Road	10	3.3	125	114	Compliant.					
			108 West Korora Rd	10	1.576	125	98.8	Compliant.					
			52 Buchanans Road	10	4.550	125	115.100	Compliant.					
Cut 4	11/28/2023	14:15	56 Buchanans Road	10	7.800	125	114.500	Compliant.					
			60 Buchanans Road	10	6.670	125	111.500	Compliant.					
			53 Bruxner Park Road	10	2.747	125	91.5	Compliant.					
Cut 16	11/28/2023	14:15	15 Bruxner Park Road	10	3.988	125	112.3	Compliant.					
			108 West Korora Rd	10	5.215	125	109.9	Compliant.					

Environment Protection Licence Monitoring Data - Water

	BIPASS	
Project Name:	Coffs Harbour Bypass	
Monitoring Period:	Νον-23	
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&bid=217	
Relevant EPL Condition/s:	L2.4, M2.3, M2.4	

## Sediment Basins (Type D):

Discharge Point	Monitoring	Date	Turbidit	y (NTU) TSS		mg/L) pH		н	Oil & Grease		Aluminium	Iron (mg/L)	Conductivity	Comment
-	Point		Licence Limit	Results	Licence Limit	Results	Licence Limit	Results	Licence Limit	Results	(mg/L)	,	(µS/cm)	
B15300	1	01/11/2023		34	50	11	6.5 to 8.5	7.8	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B21050R	1	01/11/2023		17	50	11	6.5 to 8.5	7.8	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B21100L	1	02/11/2023		30	50	17	6.5 to 8.5	7.2	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B18250R	1	02/11/2023		20	50	29	6.5 to 8.5	7	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B10100	1	02/11/2023		36	50	13	6.5 to 8.5	7.1	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B11450R	1	02/11/2023		11	50	9	6.5 to 8.5	7.7	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B15000R	1	08/11/2023		18	50	7	6.5 to 8.5	7.2	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B15300R	1	08/11/2023		12	50	12	6.5 to 8.5	6.8	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B21050R	1	08/11/2023		15	50	11	6.5 to 8.5	6.5	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B18250R	1	08/11/2023		17	50	22	6.5 to 8.5	6.8	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B21100L	1	08/11/2023		6.2	50	7	6.5 to 8.5	7.6	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B11000R	1	08/11/2023		20	50	13	6.5 to 8.5	7.7	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B11450R	1	08/11/2023		8	50	9	6.5 to 8.5	7.7	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B20750	1	09/11/2023		110	50	26	6.5 to 8.5	7.3	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B21100L	1	09/11/2023		6.2	50	7	6.5 to 8.5	7.6	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B21100L	1	09/11/2023		13	50	5	6.5 to 8.5	6.8	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B21050R	1	13/11/2023		3.9	50	5	6.5 to 8.5	7	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B12600R	1	16/11/2023		3.5	50	6	6.5 to 8.5	6.8	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B21750	1	17/11/2023		10	50	5	6.5 to 8.5	7.8	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.
B20600L	1	28/11/2023		2.9	50	4	6.5 to 8.5	7.2	None Visible	nil	N/A	N/A	N/A	Compliant with discharge limits.

Notes / Definitions / A	bbreviations:
TSS	Total Suspended Solids
mg/L	milligrams per litre
µS/cm	millisiemens per centimetre
Chromium VI	Chromium (hexavalent)
Chromium III	Chromium (trivalent)
Special Frequency 1	a) less than 24 hours prior to a controlled discharge and daily for any continued controlled discharge, when it is safe to do so; and
	b) when rainfall causes a discharge from a sediment basin which has not been emptied within the design management period following cessation of a rainfall event, when it is safe to
Special Frequency 2	a) within 24 hours following 25mm of rainfall within a day, AND
	b) within 24 hours following 74.9mm of rainfall within a 5 day period
Special Frequency 3	a) only following the dosing of any water, monitored at this point, with Aluminium based flocculant; and
	b) less than 24 hours prior to a controlled discharge and daily for any continued controlled discharge, when it is safe to do so; and
	c) when rainfall causes a discharge from a sediment basin which has not been emptied within the design management period following cessation of a rainfall event, when it is safe to do so
All metal concentrations re	sported as dissolved metals

## **Environment Protection Licence Monitoring Data - Vibration**

 Project Name:
 Coffs Harbour Bypass

 Project Name:
 Coffs Harbour Bypass

 Monitoring Period:
 Nov-23

 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 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
90m at the closest point from compaction works	Response to Complaint	M7.7	Earthworks and fill compaction	11/17/2023	2:55 PM	Unattended	Property Damage (PPV)	7.5 mm/s	0.67 mm/s	Compliant.

## Environment Protection Licence Monitoring Data - Noise



Monitoring Location	NCA	Purpose	Relevant EPL Clause	Works Monitored	Date	Time	Attended or Unattended	Parameter	Goal / Target (dBA)	Measured (dBA)	Esimtated Construction Contribution (dBA)	Comment
On site behind Korora Bus Stop (approx. 20m from Median Strip)	23	OOH Verification	L6.5	Median Works - Road Profiling	2/11/2023	10:27 PM	Attended	LAeq15min	71 at 20m	70	70	Noise levels compliant with prediction.
On site behind Korora Bus Stop (approx. 20m from Median Strip)	23	OOH Verification	L6.5	Median Works - Asphalting	2/11/2023	11:27 PM	Attended	LAeq15min	68 at 15m	69	69	Noise levels compliant with prediction (within dBA)
~5m from Gate 9A	2	Verification Monitoring	P1.2	Surface Miner	8/11/2023	2:23 PM	Attended	LAeq15min	61	66	63	Noise levels compliant with prediction (within dBA)
498 Pacific Highway	2	Verification Monitoring	P1.2	Hammer	29/11/2023	9:23 AM	Attended	LAeq15min	74	65	65	Noise levels compliant with prediction.

COFFS HARBOUR TEAM