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Via e-mail: E.Anning@linxcc.com.au

Ref: 18047 L20.2 11 May 2022

Re: Biannual Groundwater Monitoring Event 1 (2022) 240 Cormorant Road, Kooragang NSW 2304

This letter has been prepared on behalf of LINX Cargo Care Group to provide a summary of pollution monitoring data for the LINX facility located at 240 Cormorant Road, Kooragang Island, NSW 2304. The site location is provided on Figure 1.

Under Section 66(6) of the *Protection of the Environment Operations Act 1997* (POEO Act), holders of an Environment Protection Licence (EPL) must publish or make pollution monitoring data available to members of the public. For this purpose, this letter is a summary of a more detailed letter report, *Biannual Groundwater Monitoring Event 1 (2022) – 240 Cormorant Road, Kooragang NSW 2304* prepared by Cavvanba Consulting Pty Ltd in May 2022.

This letter has been prepared in accordance with the guideline *Requirements for Publishing Monitoring Data* (NSW Environment Protection Authority (EPA), 2013), and Table 1 has been specifically designed to address Section 3.7 of the guideline.

Table 1: Published monitoring data requirements (NSW EPA, 2013)

Items requiring publishing	Response
EPL number:	12521.
Licensee's name:	LINX Logistics Pty Ltd.
Address of premises:	240 Cormorant Road, Kooragang NSW 2304
Link to the EPA's Public Register:	<u>Link</u> .
Location of monitoring point / area:	Figure 2.
Pollutant:	Table 3.
Unit of measure:	Table 3.
Monitoring frequency required by the licence:	Every 6 months, in accordance with <i>Groundwater Monitoring Plan – 240 Cormorant Road, Kooragang NSW 2304</i> (Cavvanba, 2018).
Any other relevant requirements of the monitoring condition:	Nil.
Any relevant limit imposed by the licence:	Nil.

Cavvanba Consulting Pty Ltd ABN: 37 929 679 095

Items requiring publishing	Response
Relevant dates	Groundwater sampling completed in April 2022. Groundwater monitoring report published in May 2022.
Upfront notes about apparent missing data:	Nil.

The results of biannual groundwater monitoring event 1 (2022) do not indicate that groundwater conditions have changed significantly, or adverse changes in environmental conditions have occurred.



Please do not hesitate to contact the undersigned on (02) 6685-7811 should you require any additional information or clarification.

Yours sincerely Cavvanba Consulting Pty Ltd

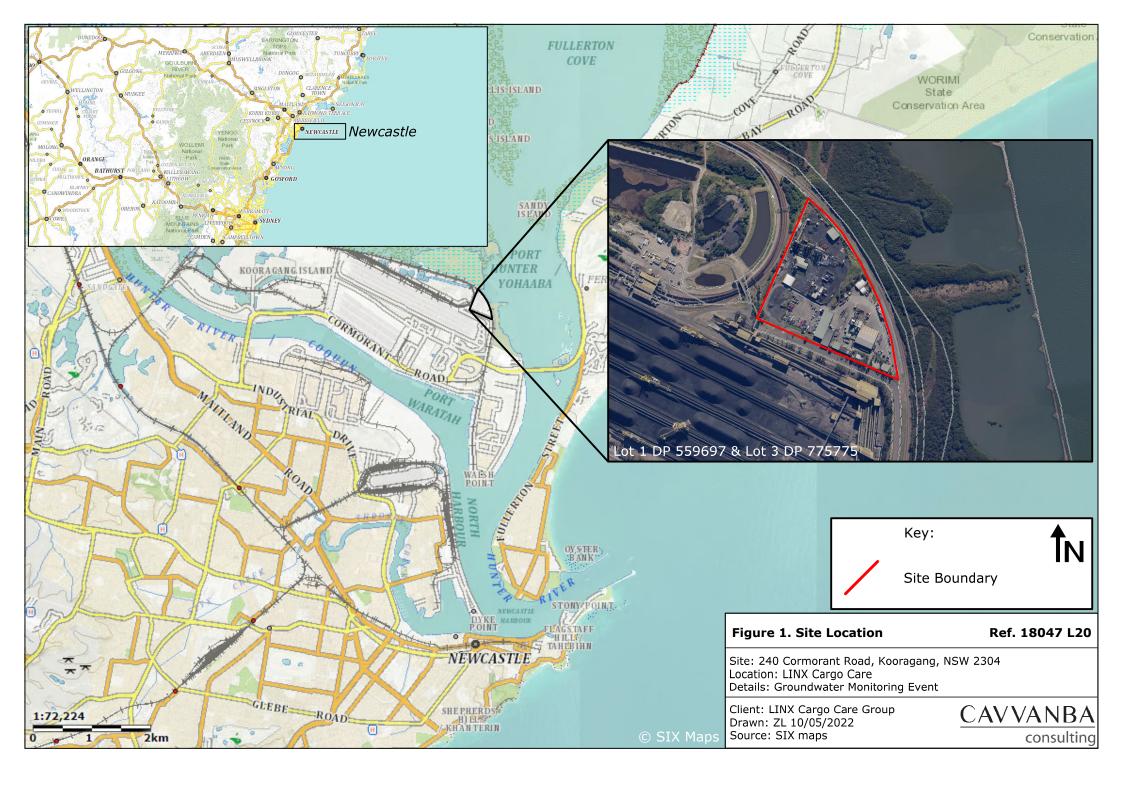
Zac Laughlan Environmental Engineer

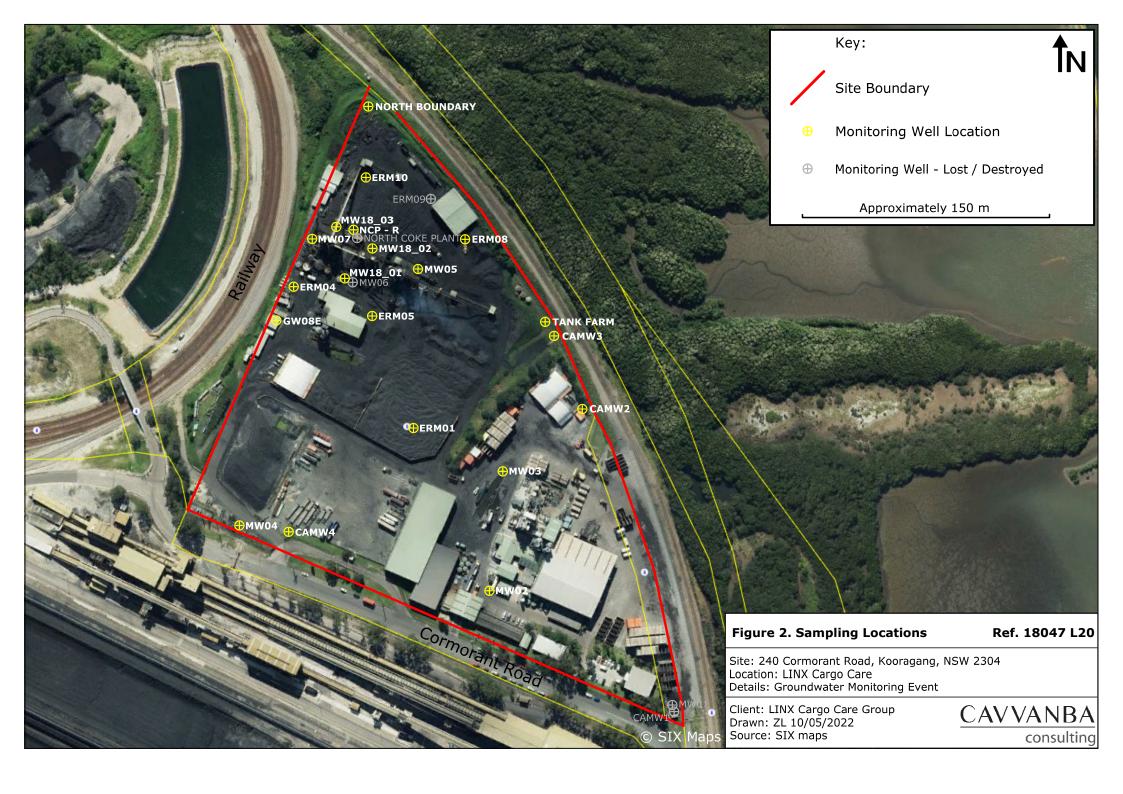
Drew Wood

Principal Environmental Scientist

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Figures





Tables

Table 1: Groundwater Gauging Data

Well ID	Gauging Date	Event	TOC Elevation (mAHD)	Ground Surface Elevation (mAHD)	Depth of Well (mbTOC)	Depth to NAPL (mbTOC)	Depth to Water (mbTOC)	NAPL Thickness (m)	Corrected Depth to Water (mbgl)	Water Elevation (mAHD)
CAMW2	20/04/2022		3.014	3.014	3.331	-	2.150	-	2.15	0.864
CAMW3	20/04/2022		3.365	3.365	3.917	-	2.391	-	2.391	0.974
CAMW4	20/04/2022		2.801	2.801	2.544	-	0.981	-	0.981	1.82
MW02	20/04/2022		2.309	2.309	2.925	-	0.795	-	0.795	1.514
MW03	20/04/2022		3.249	3.249	3.82	-	2.180	-	2.18	1.069
MW04	20/04/2022		1	-	2.972	-	0.739	-	-	-
ERM08	20/04/2022	Pre - sampling	3.087	3.14	3.728	-	1.550	-	1.603	1.537
MW05	20/04/2022		3.795	3.02	3.785	-	2.175	-	1.4	1.62
NCP-R	20/04/2022		3.576	2.89	4.265	=	1.960	=	1.274	1.616
MW07	20/04/2022		3.528	2.95	3.524	-	1.82	-	1.242	1.708
MW18_01	20/04/2022		3.925	3.184	4.396	-	2.165	-	1.424	1.760
MW18_02	20/04/2022		3.72	3.031	3.967	-	2.075	-	1.386	1.645
MW18_03	20/04/2022		3.664	2.899	4.118	-	1.985	-	1.22	1.679

m AHD: metres Australian Height Datum mbTOC: metres below top of casing NAPL: non-aqueous phase liquid mbgl: metres below ground level

Table 2: Groundwater Quality Parameters

Location ID	Date Sampled	DO (mg/L)	EC (µScm-¹)	Salinity (PPM)	рН	Eh (mV)	TEMP (°C)	Purge Volume (L)	Comments
Groundwater									
CAMW2	20/04/2022	0.92	2,199	1,407	7.41	-108.4	20.5	2.5	Clear, no odour or sheen, well in good condition
CAMW3	20/04/2022	0.89	4,450	2,848	6.99	-108.1	21.0	2.5	Clear, slight organic odour or sheen, well in good condition
CAMW4	20/04/2022	0.86	1,928	1,234	7.65	58.6	22.4	2.5	Clear, no odour or sheen, well in good condition
MW03	20/04/2022	0.85	1,204	771	7.19	-6.5	21.6	2.5	Clear, no odour or sheen, well in good condition
MW04	20/04/2022	0.79	2,605	1,667	6.95	-25.1	23.2	2.5	Orange becoming clear, no odour, no sheen, well in good condition
ERM08	20/04/2022	0.89	1,235	790	11.30	-171.4	21.6	2.5	Clear, no odour or sheen, well in good condition
MW05	20/04/2022	0.97	899	575	9.59	-234.1	22.5	2.5	Clear, no odour or sheen, well in good condition
NCP-R	20/04/2022	0.97	922	590	10.99	-115.1	21.4	2.5	Clear, no odour or sheen, well in good condition
MW07	20/04/2022	0.88	2,997	1,918	7.31	-139.7	22.6	2.5	Clear, no odour or sheen, well in good condition
MW18_01	20/04/2022	0.99	1,281	820	11.15	-99.5	23.0	2.5	Clear, no odour or sheen, well in good condition
MW18_02	20/04/2022	0.88	887	568	10.88	-109.1	21.8	2.5	Clear, no odour or sheen, well in good condition
MW18_03	20/04/2022	0.97	1,536	983	7.64	-46.4	22.9	2.5	Clear, no odour or sheen, well in good condition

Table 3: Groundwater Analytical Summary - Nutrients ($\mu g/L$)

Sample Identification	Sample Location	Date	Ammonia as N	Nitrite as N	Nitrate as N	Nitrate + Nitrite as N	Total Kjeldahl Nitrogen	Total Nitrogen as N	Total Phosphorus as P
	LOR		10	10	10	10	100	100	10
Analytical - Groundwa	ter								
CAMW2	CAMW2	20/04/2022	2,190	nd	nd	nd	2,300	2,300	110
CAMW3	CAMW3	20/04/2022	110	nd	nd	nd	500	500	80
CAMW4	CAMW4	20/04/2022	40	100	150	250	200	400	50
MW03	MW03	20/04/2022	11,500	20	1,190	1,210	12,000	13,200	260
MW04	MW04			nd	nd	nd	300	300	240
ERM08	ERM08 20/04/2022		2,320	50	nd	30	2,600	2,600	10
MW05	MW05			nd	nd	nd	2,900	2,900	20
NCP-R	NCP-R	20/04/2022	4,120	310	nd	260	4,900	5,200	20
MW07	MW07	20/04/2022	1,040	nd	nd	nd	1,600	1,600	490
MW18_01	MW18_01	20/04/2022	840	250	nd	190	900	1,100	nd
MW18_02	MW18_02	20/04/2022	5,960	1,430	2,190	3,620	7,500	11,100	10
MW18_03	MW18_03	20/04/2022	650	nd	nd	nd	1,000	1,000	60
Statistics									
Samples analysed			12	12	12	12	12	12	12
Detects			12	6	3	6	12	12	11
% detect			100%	50%	25%	50%	100%	100%	92%
Maximum			11,500	1,430	2,190	3,620	12,000	13,200	490
Mean		2,409	309	883	794	2,823	3,246	113	
Median		1,040	100	670	250	1,600	1,600	55	
Minimum		<10	<10	<10	<10	200	300	<10	
Criteria			-						
Marine Waters ¹		910	-	-	-	-	-	-	

Groundwater Analytical Summary Table Notes

LOR - limit of reporting (standard LOR unless otherwise shown)

nd - not detected above the LOR

Bold - Exceeds criteria

- ^ LOR raised
- denotes not analysed/not available

Italics - Exceeds adjusted criteria according to Table 8.3.7, ANZECC/ARMCANZ (2000) as total ammonia-N at differing pH (temperature not taken into consideration).

1. Aquatic ecosystem criteria from Australian New Zealand Environment and Conservation Council (ANZECC) / Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) (2000) Australian and New Zealand Guidelines for Fresh and Marine Water Quality, including Table 3.4.1 and Section 8.3.7.

The 95% species protection levels are to be applied for slightly to moderately-disturbed ecosystems (most urban catchments) and the 99% species protection levels for pristine or vulnerable ecosystems or where the contaminants are intractable (e.g. bioaccumulative).