

## May 2024

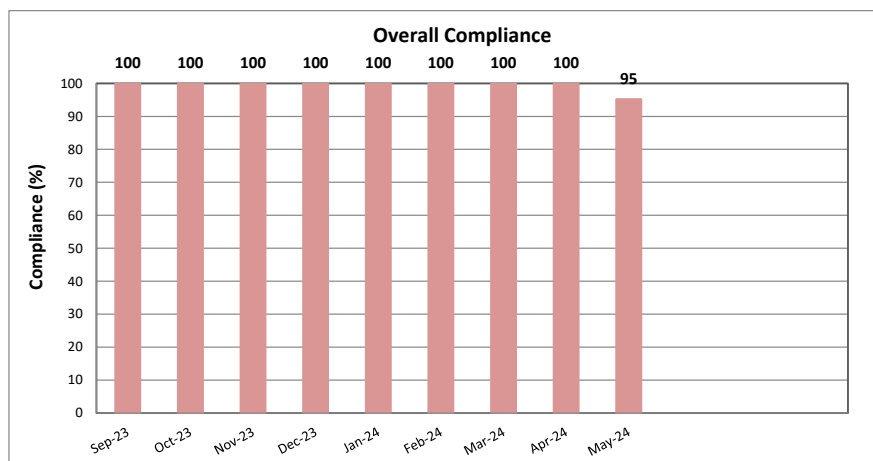
### East London Cambridge Effluent Plant

### Uitenhage

### Site Information

Date of Sampling	02/05/2024
Sampling Point Identification	-32.967250 27.899750
Depot	East London Cambridge Effluent Plant
Region	Uitenhage
Treatment Technology	Not available/Unknown
Design Information	Not available/Unknown
Design/Current Capacity	Not available/Unknown
Flow Meter	None
Responsible Authority	Buffalo City Metropolitan Municipality
Discharge Point	Municipal sewer

### Compliance History



### Findings

<b>Overall Compliance</b>	<b>95%</b>		
<b>Non-compliant Parameters</b>	Boron		
<b>Plant Operational</b>	Yes	No	n/a
<b>Maintenance</b>	Yes	No	n/a
<b>Site Neatness</b>	Yes	No	Spillage
<b>Access</b>	Easy	Difficult	Risk

### Recommendation(s)

Vegetation around the plant and belts not working.

### Site Visit Photo



Parameter	Temperature		pH Value		EC		COD		TSS		Chloride		Sulphate		Soap,Oil&Grease		Phosphate		Ammonia	
Month	44°C		6.0 - 12.0		400 mS/m		mg/l		1500 mg/l		750 mg/l		500 mg/l		400 mg/l		25 mg/l		mg/l	
September 2023	19.7	C	6.8	C	85	C	352		88	C	73	C	31	C	0	C	2	C	0	
October 2023	22.2	C	7.2	C	74	C	214		64	C	69	C	29	C	74	C	2	C	0	
November 2023	22.7	C	7.5	C	50	C	36		17	C	43	C	32	C	0	C	0	C	0	
December 2023	24.8	C	7.1	C	93	C	622		37	C	111	C	37	C	0	C	0	C	0	
January 2024	27.1	C	6.7	C	31	C	20		10	C	18	C	12	C	0	C	0	C	0	
February 2024	27.1	C	7.3	C	48	C	143		28	C	64	C	31	C	12	C	1	C	0	
March 2024	27.8	C	6.8	C	28	C	68		48	C	42	C	22	C	2	C	1	C	0	
April 2024	19.9	C	7.3	C	37	C	121		12	C	46	C	33	C	4	C	1	C	0	
May 2024	20.2	C	7.2	C	57	C	421		217	C	50	C	26	C	0	C	3	C	0	
Parameter	Arsenic		Boron		Cadmium		Chromium		Cobalt		Copper		Iron		Lead		Manganese		Mercury	
Month	5 mg/l		5 mg/l		5 mg/l		20 mg/l		mg/l		20 mg/l		20 mg/l		5 mg/l		mg/l		1 mg/l	
September 2023	0.0	C	1.1	C	0.0	C	0.0	C	0.0		0.1	C	1.5	C	0.0	C	0.2		0.0	C
October 2023	0.0	C	0.4	C	0.0	C	0.0	C	0.0		0.0	C	0.8	C	0.0	C	0.2		0.0	C
November 2023	0.0	C	0.2	C	0.0	C	0.0	C	0.0		0.0	C	0.2	C	0.0	C	0.1		0.0	C
December 2023	0.0	C	0.3	C	0.0	C	0.0	C	0.0		0.0	C	1.5	C	0.0	C	0.3		0.0	C
January 2024	0.0	C	0.1	C	0.0	C	0.0	C	0.0		0.0	C	0.1	C	0.0	C	0.0		0.0	C
February 2024	0.0	C	0.4	C	0.0	C	0.0	C	0.0		0.0	C	1.5	C	0.0	C	0.3		0.0	C
March 2024	0.0	C	0.0	C	0.0	C	0.0	C	0.0		0.0	C	1.1	C	0.0	C	0.0		0.0	C
April 2024	0.0	C	0.3	C	0.0	C	0.0	C	0.0		0.0	C	0.9	C	0.0	C	0.2		0.0	C
May 2024	0.0	C	12.0	N	0.0	C	0.0	C	0.0		0.0	C	1.7	C	0.0	C	0.2		0.0	C

C

= Compliant

N

= Non-compliant

NS

= No Sample Received

NA

= Unable to Analyse

Parameter	Molybdenum		Nickel		Selenium		Silver		Sodium		Titanium		Zinc	
Month	5 mg/l		20 mg/l		5 mg/l		mg/l		500 mg/l		mg/l		20 mg/l	
September 2023	0.0	C	0.0	C	0.0	C	0.0		142	C	0.0		0.2	C
October 2023	0.0	C	0.0	C	0.0	C	0.0		111	C	0.0		0.1	C
November 2023	0.0	C	0.0	C	0.0	C	0.0		84.0	C	0.0		0.1	C
December 2023	0.0	C	0.0	C	0.0	C	0.0		117	C	0.0		0.4	C
January 2024	0.0	C	0.0	C	0.0	C	0.0		37.0	C	0.0		0.2	C
February 2024	0.0	C	0.0	C	0.0	C	0.0		109	C	0.0		0.1	C
March 2024	0.0	C	0.0	C	0.0	C	0.0		61.0	C	0.0		0.0	C
April 2024	0.0	C	0.0	C	0.0	C	0.0		69.0	C	0.0		0.1	C
May 2024	0.0	C	0.0	C	0.0	C	0.0		165	C	0.0		0.8	C

C = Compliant

N = Non-compliant

NS = No Sample Received

NA = Unable to Analyse

## CERTIFICATE OF ANALYSES

CONFIDENTIAL

Identification	UTH East London Cambridge Effluent Plant	Report/Lab number	0285/24
Customer	Transnet Engineering	Date Sampled	02/05/2024
Contact Person	Mmalaka Phejane	Date Received	06/05/2024
Contact number	012 391 1320	Date Started-Completed In-house	06-14/05/2024
Email Address	<a href="mailto:Mmalaka.Phejane@transnet.net">Mmalaka.Phejane@transnet.net</a>	Sub Completed	20/05/2024
Physical Address	160 Lynette Street, Kilner Park, Pretoria	Date of Report	21/05/2024

A N S	Determinants	Unit	Method	Sample ID
				0285-01
N	Temperature	°C	-	20.2
A	pH Value at 25°C	-	LA001	7.2
A	Conductivity	mS/m	LA003	57
A	Chemical Oxygen Demand	mg/l	LA013	421
N	Total Suspended Solids	mg/l	LA006	217
A	Chloride - Cl	mg/l	LA029	50
A	Sulphate - SO <sub>4</sub>	mg/l	LA030	26
S	Oil & Grease	mg/l	-	<0.100
A	Ortho-Phosphate - P	mg/l	LA028	3.3
A	Ammonia - NH <sub>3</sub> as N	mg/l	LA033	<0.5
S	Arsenic - As	mg/l	-	0.003
S	Boron - B	mg/l	-	12
S	Cadmium - Cd	mg/l	-	0.001
S	Chromium - Cr	mg/l	-	0.035
S	Cobalt - Co	mg/l	-	<0.025
S	Copper - Cu	mg/l	-	0.024
S	Iron - Fe	mg/l	-	1.74
S	Lead - Pb	mg/l	-	0.021
S	Manganese - Mn	mg/l	-	0.192
S	Mercury - Hg	mg/l	-	<0.001
S	Molybdenum - Mo	mg/l	-	<0.025
S	Nickel - Ni	mg/l	-	<0.025

NA - No Analysis done due to incompatible sample matrix; A – SANAS Accredited Method, N – Method Not Accredited – Results marked "N" in this report are not included in the SANAS Schedule of Accreditation for this laboratory; S – indicates Subcontracted Test - Results marked "Subcontracted Test" in this report are not included in the SANAS Schedule of Accreditation for this laboratory. Results only apply to the samples as received and tested.

Uncertainty of Measurement data (for methods included in the SANAS Schedule of Accreditation) is available on request, as are dates of analysis for each parameter tested. The report shall not be reproduced except in full without approval of the laboratory. Sampling dates and sample identification are given from information provided by the customer.

*R Lax*  
**Technical Signatory**

## CERTIFICATE OF ANALYSES

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A N S	Determinants	Unit	Method	Sample ID
				0285-01
S	Selenium - Se	mg/l	-	0.001
S	Silver - Ag	mg/l	-	<0.025
S	Sodium - Na	mg/l	-	165
S	Titanium - Ti	mg/l	-	<0.03
S	Zinc - Zn	mg/l	-	0.822
End of Certificate				

Comments (sample damages/leakages, also state if this report replaces any other report (ammended) :

NA - No Analysis done due to incompatible sample matrix; A – SANAS Accredited Method, N – Method Not Accredited – Results marked "N" in this report are not included in the SANAS Schedule of Accreditation for this laboratory; S – indicates Subcontracted Test - Results marked "Subcontracted Test" in this report are not included in the SANAS Schedule of Accreditation for this laboratory. Results only apply to the samples as received and tested. Uncertainty of Measurement data (for methods included in the SANAS Schedule of Accreditation) is available on request, as are dates of analysis for each parameter tested. The report shall not be reproduced except in full without approval of the laboratory. Sampling dates and sample identification are given from information provided by the customer.

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**Technical Signatory**