

MAY 2025

ANKERLIG POWER STATION MONTHLY EMISSION REPORT
Atmospheric Emission Licence WCCT036





Ian Gildenhuys
Air Quality Management
246 Voortrekker Road
Vasco
7460

Date:
13 June 2025

Enquiries:
021 573 6162

Ref: ANK/2025/05

Dear Ian

ANKERLIG POWER STATION'S MONTHLY EMISSIONS REPORT FOR THE MONTH OF MAY 2025

This serves as the monthly report required in terms of Section 9 in Ankerlig Power Station's Atmospheric Emission License (WCCT036). The emissions are for the month of May, these being SO₂, CO₂, PM and NO_x (as NO₂).

1 Raw Materials and Products

Table 1: Quantity of Raw Materials and Products used/produced for the month of May 2025

Raw Materials and Products	Raw Material Type	Units	Max Permitted Consumption Rates/unit	Station Consumption Rate May 2025
	Diesel	Litres	40 000	33 204 445.79
	LPG	Kg	19 per start/unit	
Hours of operation	Permitted Hrs of operation	Total No of hours operated under normal conditions		
	24/7	544		
Production Rates	Product/By-product	Units	Max Production Capacity Permitted	Production Rate: May 2025
	Energy	MW	150	101 506.34

NB: Figures reported are station figures while the limits are unit based (x9)

Table 2: Fuel usage per unit and efficiency

Generation Division
Peaking Business Unit
15 Pasita Street, Rosenpark, Tygervalley, 7536.
PO Box 3487, Tygerpark, Western Cape 7536 SA
Tel +27 21 941 5800 Fax +27 21 914 3131 www.eskom.co.za

Fuel Usage Per Unit/Hour	Fuel Efficiency
Unit 11: 30 807.27 Unit 12: N/A Unit 21: 31 036.45 Unit 22: 29 203.60 Unit 31: 30 437.66 Unit 32: 30.619.51 Unit 41: 29 293.60 Unit 42: 30 955.14 Unit 43: 30 330.58	Unit 11: 324.67 Unit 12: N/A Unit 21: 325.34 Unit 22: 331.06 Unit 31: 332.41 Unit 32: 333.78 Unit 41: 321.16 Unit 42: 325.54 Unit 43: 326.04

"The Emidate System from where the data is populated list the specific reference conditions"

2 Hours of Operation

Table 3: Each unit and respective days operating under normal operation (Please note the units rarely run for the entire day)

Unit	Hours operating under normal operation	Test-run hours	Total
11	69	65	134
12	0	0	0
21	73	67	140
22	38	43	81
31	55	64	119
32	79	85	164
41	84	91	175
42	88	77	165
43	58	57	115
Total	544	549	1093

3 Abatement Technology

Table 4: Abatement Equipment Control Technology availability for the month of May

Associated Unit	Technology Type	Actual Utilisation (%) for the month of May
Unit 11	Low NOx burners	100%
Unit 12	N/A	N/A
Unit 21	Low NOx burners	100%
Unit 22	Low NOx burners	100%
Unit 31	Low NOx burners	100%
Unit 32	Low NOx burners	100%
Unit 41	Low NOx burners	100%
Unit 42	Low NOx burners	100%
Unit 43	Low NOx burners	100%

Table 5: Tonnages and mg/Nm³ for the month of May

	Date	CO (mg/Nm ³)	NO _x (mg/Nm ³)	PM (mg/Nm ³)	SO ₂ (mg/Nm ³)
Hourly Licence Limit mg/Nm³			250	50	500
Unit 11	2025/05/05	0.6	147	0	2.2
	2025/05/06	0.1	20	0	0.1
	2025/05/07	0.1	17	0	0.1
	2025/05/11	0.1	25	0	0.1
	2025/05/12	0.43	94	0	0.73
	2025/05/13	0.71	57.71	0	0.46
	2025/05/14	3.07	19.57	0	0.8
	2025/05/15	2.73	86.33	0	2.07
	2025/05/16	0.1	1	0	0.13
	2025/05/19	0.53	108.33	0	0.67
	2025/05/20	0.5	132	0	1.7
	2025/05/21	0.7	136	0	4.05
	2025/05/22	0.28	53.6	0	0.3
	2025/05/23	1.33	113.75	0	2.36
	2025/05/24	0.1	0.4	0	0.1
	2025/05/25	0.1	0	0	0.2
	2025/05/26	0.1	0	0	0.35
	2025/05/27	1.05	124	0	0.58
	2025/05/28	0.5	84	0	0.5
	2025/05/29	0.65	77.75	0	1.2
	2025/05/31	0.4	87	0	8.3

Unit 12	N/A				
Unit 21	2025/05/03	2.1	141	0	0.3
	2025/05/05	2	125	0	2.2
	2025/05/06	1.9	120	0	0.7
	2025/05/07	1.9	110	0	0.5
	2025/05/08	2	112	0	0.1
	2025/05/11	3.2	139	0	0.2
	2025/05/12	2.03	129	0	0.4
	2025/05/13	1.62	117.5	0	0.77
	2025/05/14	2	109	0	0.1
	2025/05/15	3.87	123.57	0	0.27
	2025/05/16	5.5	123.33	0	0.9
	2025/05/19	5.93	110.67	0	0.3
	2025/05/20	5.5	129	0	1.1
	2025/05/21	4.75	122	0	1.05
	2025/05/22	5.26	107.6	0	0.12
	2025/05/23	5.85	113.67	0	0.34
	2025/05/24	7.02	115.17	0	0.15
	2025/05/25	7	101	0	0.1
	2025/05/26	5.75	111	0	0.2
	2025/05/27	6.33	113.75	0	0.33
	2025/05/28	5.2	111	0	0.1
	2025/05/29	4.83	109.5	0	0.3
	2025/05/30	5.2	113	0	0.2
	2025/05/31	4.6	123.5	0	1.0
Unit 22	2025/05/06	0.9	131	0	0
	2025/05/07	0.7	113	0	0
	2025/05/12	0.1	134.33	0	2.32
	2025/05/13	0.4	112.17	0.52	0.83
	2025/05/14	0.7	117	0.5	0
	2025/05/15	0.44	125	0.5	1.26
	2025/05/16	0.9	121	0.5	1.3
	2025/05/24	0.38	117.8	0	0.78
	2025/05/25	0.2	101	0	0
	2025/05/26	0.3	121	0	0
	2025/05/27	0.5	118	0	0.55
	2025/05/28	1	115	0	0.7
	2025/05/29	0.2	113.5	0	0
	2025/05/31	0.5	136	0	0

Unit 31	2025/05/06	3.9	143	0	1.7
	2025/05/07	3.4	125	0	1
	2025/05/12	2.6	151	0	0.47
	2025/05/13	2.78	127.83	0	1.53
	2025/05/14	3.7	122.5	0	0.1
	2025/05/15	2.57	145.17	0	2.97
	2025/05/16	3	128.5	0	0.85
	2025/05/19	3.45	137.5	0	0
	2025/05/21	3.08	125	0	2.28
	2025/05/22	2.24	121.2	0	2.54
	2025/05/23	2.2	152.17	0	1.18
	2025/05/24	2.04	137.4	0	4.12
	2025/05/25	3.7	113	0	0.9
	2025/05/26	5.3	142	0	0.3
	2025/05/27	3.2	153	0	1
	2025/05/28	4.2	127	0	0
	2025/05/29	3.28	128.75	0	0.88
	2025/05/31	2.9	126.5	0	0.5
Unit 32	2025/05/03	3.8	171	0	9
	2025/05/05	2.8	151	0	5.4
	2025/05/06	3.8	149	0	7.1
	2025/05/07	4.4	142	0	9.8
	2025/05/08	3.3	145	0	9.55
	2025/05/11	2.65	135.5	0	5
	2025/05/12	1.27	160.33	0	3.83
	2025/05/13	2.07	144.67	0	8.2
	2025/05/14	2.8	140.5	0	5.45
	2025/05/15	3.01	158.29	0	4.49
	2025/05/16	0.17	150.33	0	11.73
	2025/05/17	2	145	0	14
	2025/05/19	0.8	145.33	0	4
	2025/05/20	0.5	154	0	3.2
	2025/05/21	1.22	134.8	0	0.74
	2025/05/22	3.35	157	0	7.3
	2025/05/23	2.05	163.75	0	8.13
	2025/05/24	2.58	157	0	7.98
	2025/05/25	3.4	135	0	10.9
	2025/05/26	3.4	155	0	4.3
	2025/05/27	3.15	160	0	12.33
	2025/05/28	2.5	159	0	2.23
	2025/05/29	2.1	144.6	0	0.14
	2025/05/30	3.7	167	0	3.4
	2025/05/31	3.3	141	0	1.7

Unit 41	2025/05/03	0.8	166	0	1.4
	2025/05/04	1.6	160	0	3
	2025/05/05	1	153	0	2.7
	2025/05/06	0.3	147	0	0.2
	2025/05/07	0.3	137	0	0.2
	2025/05/08	0.85	143	0	1.55
	2025/05/09	1.6	150	0	5.6
	2025/05/11	0.9	134	0	3.4
	2025/05/12	0.9	160.33	0	2.97
	2025/05/13	0.74	142.86	0	2.59
	2025/05/14	0.85	132	0	3.58
	2025/05/15	0.81	155.71	0	2.04
	2025/05/16	1.45	155.5	0.04	6.61
	2025/05/17	0.7	141	0	2.2
	2025/05/19	0.73	142	0	4.6
	2025/05/20	0.4	135	0	3.9
	2025/05/21	1.12	130.8	0	5.52
	2025/05/22	1.27	131.5	0	5.27
	2025/05/23	1	154.22	0	6.28
	2025/05/24	1.57	153	0	8.22
	2025/05/25	0.2	133	0	1.3
	2025/05/26	0.5	156	0	2.1
	2025/05/27	0.78	143.4	0	4.34
	2025/05/28	0.6	141	0	3.6
	2025/05/29	0.7	137	0	3.5
	2025/05/30	0.6	162	0	3.1
	2025/05/31	0.1	139	0	3.2
Unit 42	2025/05/03	3.8	182	0.1	1.2
	2025/05/04	5.3	190	0.1	1.1
	2025/05/05	3.7	160	0.1	1
	2025/05/06	2.4	160	0.1	1
	2025/05/07	5.4	158	0.1	0.6
	2025/05/08	3.8	151	0.1	1
	2025/05/09	4.9	164	0.1	3.8
	2025/05/11	1.95	144.5	0.1	0.7
	2025/05/12	3.27	174	0.07	0.83
	2025/05/13	4.16	152.56	0.008	2.03
	2025/05/14	4.07	143.33	0.06	1.83
	2025/05/15	3.01	166.43	0.1	1.33
	2025/05/16	4.43	162.67	0.1	1.1
	2025/05/17	2.9	156	0.1	3.5
	2025/05/19	3.3	150.33	0.1	1.23
	2025/05/20	3.7	142	0.1	2

	2025/05/21	3.58	141.8	0.1	1.12
	2025/05/22	2.7	140.6	0.1	0.98
	2025/05/23	4.53	170.58	0.1	1.44
	2025/05/24	3.79	160	0.1	0.81
	2025/05/25	1.9	141	0.1	0.5
	2025/05/26	3.5	151	0.1	1.57
	2025/05/27	3.45	154.5	0.1	0.98
	2025/05/28	3.1	155	0.1	0.8
	2025/05/29	3.87	149.2	0.1	0.98
	2025/05/30	4	174	0.1	2
	2025/05/31	3.6	147.5	0.1	1.2
Unit 43	2025/05/06	2.5	130	0	3.7
	2025/05/07	2.5	119	0	6.9
	2025/05/12	1.67	139.33	0.53	2.77
	2025/05/13	2.4	116.83	0.43	4.28
	2025/05/14	2.8	111	0.45	3.8
	2025/05/15	2.1	131.58	0.19	5
	2025/05/19	3.2	140	0.1	7.4
	2025/05/21	2.68	108.5	0.13	4.45
	2025/05/22	2.6	109.4	0.12	5.64
	2025/05/23	1.8	137.67	0.1	3.73
	2025/05/24	2.08	120	0.08	5.68
	2025/05/25	2.3	104	0.1	3.7
	2025/05/26	2.1	130	0.2	1.9
	2025/05/27	1.85	131.5	0.15	4
	2025/05/28	2.7	130	0.1	7.4
	2025/05/29	2.95	118.5	0.13	7.33
	2025/05/31	9	118	0	4.4
Total Emission mass (Tons)		14.696	104.675	0.031	2.814

Units 11, 21,22 & 43's NO_x and SO_x monitor read abnormal at times during the month due to the cooler leak. Spares have been ordered, and delivery is eminent.

COMMENT: All pollutants measured were within allowed limits and no non-conformances were registered for the month under review.

4 Monitoring Equipment: Continuous Emission Monitoring System (CEMS) availability

Table 6: Actual Utilisation (%) for the month

Associated Unit	Technology Type	Actual Utilisation (%) for the month of May
Unit 11	CEMS	50.72%
Unit 12	CEMS	N/A

Unit 21	CEMS	98.63%
Unit 22	CEMS	100%
Unit 31	CEMS	100%
Unit 32	CEMS	100%
Unit 41	CEMS	100%
Unit 42	CEMS	100%
Unit 43	CEMS	98.28%

Continuous Emissions Monitoring System (CEMS) at GT11's availability was below 80%. Please note that the unit is not operating under any "upset" combustion process and does not pose a risk to the environment.

5 Monitoring Equipment Calibration

Continuous Emission Monitoring System (CEMS) is always online unless a fault is reported. The system auto calibrates every four (4) hours and raises an alarm if auto calibration is out of spec. Onsite technicians calibrate the system with calibration gas annually.

6 Ambient Monitoring Station

The station's new AEL does not require operation of an ambient monitoring station until decommissioning of Acacia Power Station.

7 Load Factor: 10.28%

8 Leak Detection and Repair programme

No leaks were reported during May 2025

9 Complaints Register

Table 7. Complaints for the month of May 2025

Source Code/ Name	Root Cause Analysis	Calculation of Impacts/ emissions associated with the incident	Dispersion modelling of pollutants where applicable	Measures implemented to prevent reoccurrence	Date by which measure will be implemented
None	N/A	N/A	N/A	N/A	N/A

10 General

The rest of the information demonstrating compliance with the emission license conditions is supplied in the annual emission reports sent to your office.

Trusting the above meets the reporting requirements specified within the stations' Atmospheric Emission License.

Do not hesitate to contact Maureen Dlulisa on 021 573 6162 for any related queries.

Yours sincerely



Pamela Mrubata

ANKERLIG POWER STATION