



Licence Number: Gala.t.F1/1716/2019

LICENCE FOR THE CONSTRUCTION OF A GAS TRANSMISSION FACILITY

This licence is issued by the National Energy Regulator of South Africa, hereinafter referred to as “NERSA”, in terms of the Gas Act, 2001 (Act No. 48 of 2001). This licence is issued to:

EGOLI GAS (PTY) LIMITED

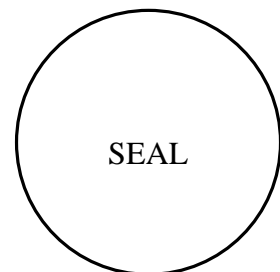
(Company Registration No: 2013/109028/07)

Hereinafter referred to as “the Licensee”, only for the purpose of constructing a gas transmission facility in the Wadeville area of the Ekurhuleni Metropolitan Municipality in the Gauteng province.

The construction of the gas transmission facility permitted under this licence is subject to the terms and conditions as contained in this licence and/or amendments to these conditions as imposed by NERSA. The Licensee must comply with these licence conditions.

ISSUED at Pretoria on this theday of 2018.

**CHIEF EXECUTIVE OFFICER
NATIONAL ENERGY REGULATOR**





LICENCE CONDITIONS FOR A CONSTRUCTION OF A GAS TRANSMISSION FACILITY IN THE WADEVILLE AREA OF THE EKURHULENI METROPOLITAN MUNICIPALITY OF THE GAUTENG PROVINCE

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DEFINITIONS

In these licence conditions any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned, unless the context indicates otherwise.

In these licence conditions, the following expressions shall have the following meanings:-

“authorised person” means any person holding a valid authorisation permit as defined by the Rules.

“Regulations” means the Piped-Gas Regulations made in terms of the Act.

“Rules” means Rules made by NERSA in terms of section 34(3) of the Act.

“the Act” means the Gas Act, 2001 (Act No. 48 of 2001), and includes Regulations made under the Act.

“HPCMS” means the High Pressure Customer Meter Station.

“CMS” means the Customer Meter Station.

CHAPTER ONE: LICENSED ACTIVITIES

1 Licensed Activities

- 1.1 The NERSA grants the Licensee a licence to construct a gas transmission facility as depicted on **Annexure A1, Annexure A2** and **Annexure A3** attached hereto with the following specifications:

Table 1: Specifications of the gas transmission facility to be constructed

Specifications of the gas transmission facility to be constructed	
Properties	Specifications
1. Pipeline to HPCMS	
Pipeline Length	20 meters (from the tie-in to the HPCMS)
Pipeline inner diameter	40.94 mm
Pipeline outer diameter	48.3 mm
Material of design	Carbon Steel
Maximum allowable pressure	49 bar gauge
Average operating pressure	35 bar gauge
Maximum capacity-throughput	1500 Gigajoules/hr
X_coordinate	30.8899944
Y_coordinate	-30.108587
2. High Pressure Customer Meter Station (HPCMS)	
Inlet pressure	23-35 bar
Outlet pressure	3.5 bar
3. High Pressure Customer Meter Station (HPCMS)	
Inlet average pressure	32.5 bar gauge
Maximum operating pressure	35 bar gauge
Minimum operating pressure	23 bar gauge
Average operating pressure	23 bar gauge
Flow rate at 35 bar gauge	625 m ³ /hr
Flow rate at 30 bar gauge	300 m ³ /hr
Outlet average pressure (regulated)	10.5 bar gauge
4. Pipeline from HPCMS to the 3.5 bar CMS	

Specifications of the gas transmission facility to be constructed	
Properties	Specifications
Pipeline Length	18 meters
Pipeline inner diameter	40.94 mm
Pipeline outer diameter	48.30 mm
Material of design	Carbon steel
Maximum allowable pressure	6 bar gauge
Average operating pressure	2-3.5 bar gauge
Maximum capacity-throughput	625 m ³ /hr
5. 3.5 bar Customer Meter Station (CMS)	
Inlet pressure	2-3.5 bar gauge
Maximum operating pressure	4.9 bar gauge
Average operating pressure	3.0 bar gauge
Normal operating pressure	2-3.5 bar gauge
Flow rate at 3.5 bar gauge	500 m ³ /hr
Flow rate at 3.0 bar gauge	218 m ³ /hr
Outlet pressure (regulated)	2-3.5 bar gauge
6. Pressure Reduction Station (PRS)	
Inlet pressure	2-3.5 bar gauge
Outlet pressure	1.8 bar gauge
7. Pipeline from HPCMS to the 1.8 bar CMS (Reticulation)	
Pipeline length	500 meters
Material design	HDPE
Pipeline inner diameter	150 mm
Pipeline outer diameter	180 mm
Maximum operating pressure	1.8 bar gauge
Average operating pressure	1 bar gauge
Maximum capacity-throughput	200 m ³ /hr

- 1.2 The facility contemplated in paragraph 1.1 above must be completed and become operational within 36 months of the date of issue of this licence.

- 1.3 The Licensee must carry out the construction activity for which the licence is granted.
- 1.4 Upon completion of the construction activities mentioned in paragraph 1.1 above, the Licensee must apply for the operation activities of the constructed transmission facility in terms of section 16 of the Gas Act.
- 1.5 The Licensee may not assign this licence to another party.

2 Duration of Licence

The licence is valid for a period of twenty five (25) years from the date of issue, unless revoked by NERSA in accordance with the provisions of the Act.

CHAPTER TWO: GENERAL CONDITIONS

3 Amendment of Licence

This licence may be amended by NERSA in accordance with the Act and the Rules.

4 Revocation of Licence

This licence may be revoked by NERSA in accordance with the provisions of the Act.

5 Compliance

5.1 The Licensee must at all times comply with the conditions of this licence, the Act and the Rules.

5.2 This licence is granted only in terms of the Act and for the activities specified and described in paragraph 1.1 above. This licence does not exempt the Licensee from compliance with any other legislation.

6 Changes in Licensee Particulars

6.1 The Licensee must notify NERSA if control of the Licensee as contemplated in section 12(2) of the Competition Act, 1998 (Act No. 89 of 1998) changes.

6.2 The Licensee must notify NERSA if the composition of the board of directors of the Licensee changes.

6.3 The Licensee must at all times provide NERSA with the details of any changes in the registered name, operating or trading name, registered

address and other contact details, including but not limited to, the names, telephone numbers, facsimile numbers and email addresses of contact persons.

- 6.4 The notifications contemplated in 6.1 and 6.3 above must be provided within fourteen (14) days of the event giving rise to them.

7 Correspondence with NERSA

- 7.1 All official communication by the Licensee with NERSA must be in writing, signed and addressed to NERSA.

- 7.2 The Licensee must in all correspondence with NERSA quote the licence reference number as it appears on this licence certificate.

8 Entry, Inspection and Gathering of Information

The Licensee must, in the manner prescribed by the Rules, permit any Person authorised in terms of section 29 of the Gas Act to, at all reasonable times, enter and inspect any property on which the licensed activity is taking place.

9 Participation of Historically Disadvantaged South Africans

- 9.1 The Licensee must annually provide NERSA with the information regarding the promotion of Historically Disadvantaged South Africans as prescribed in Regulation 5 of the Regulations in terms of the Gas Act.

- 9.2 The Licensee must submit the information contemplated in 9.1 above to NERSA within thirty (30) days of its financial year end.

10 Monitoring and Provision of Information

- 10.1 The Licensee shall keep all records relating to the compliance and non-compliance with the conditions of this licence. Such records shall be made available to NERSA within fourteen (14) days of receipt of a written request for such records.
- 10.2 The Licensee must provide NERSA with quarterly reports indicating the progress made in terms of the execution of the licensed activity.
- 10.3 Within three months after completion of the construction activities as contemplated in paragraph 1.1 above, the Licensee must provide NERSA, with as-built maps and drawings and identify any deviations and differences from **Annexures A1, A2 and A3** attached hereto, as well as reasons for such deviations and differences.
- 10.4 The Licensee must furnish NERSA with any information in such form and manner and at such times as NERSA may require in the performance of its duties or functions under the Gas Act and the Agreement.

CHAPTER THREE: SPECIFIC CONDITIONS

11 Commencement and completion of construction

- 11.1 The Licensee must commence the construction activities contemplated in Chapter One, within 12 months of the date of issue of the licence.
- 11.2 The Licensee must notify NERSA of the date of commencement of construction at least 7 days prior to the commencement of construction.
- 11.3 The Licensee must complete the construction of the licensed facility contemplated in paragraph 1.1 above and the facility must be ready for operation within 36 calendar months of the date of issue of this licence.

12 Construction of the Transmission Pipeline

- 12.1 All construction work must be performed in conformity with the maps and specifications as contained in **Annexures A1, A2 and A3**, and **Annexures C** hereto.
- 12.2 The Licensee must comply with the Gas Act regarding the rights and obligations it has in respect of the premises or land belonging to others.
- 12.3 All construction activities must comply with the applicable and relevant codes, standards and regulations as listed in **Annexure C** hereto.
- 12.4 Sections 21(1) (a), 21(1) (b), 21(1) (c), 21(1) (r); 21(1) (t), and 21(1) (u) of the Act are conditions of this Licence.

13 Ancillary Obligation

The Licensee is responsible for compliance with these licence conditions regarding any work on the transmission facility or services that are the subject of this license and/or that are subcontracted to other parties.

14 Whole Licence

This licence and licence conditions constitute the entire licence and supersedes all prior understandings and agreements between the Licensee and NERSA.

Annexure A: Map depicting the route of pipeline



Annexure A1: Mechanical Flow Diagram – HPCMS



Annexure A2: Mechanical Flow Diagram – 3.5 bar CMS



Annexure A3: Mechanical Flow Diagram – 1.8 bar CMS



Annexure B: Natural Gas Combustion Properties

Property	Units	Limits (Min/Max)
Energy content (HHV)	MJ/m ³ _n	38.1 - 43.5
Wobble index	Low - high	50.9 - 55.1
Relative density (RD)	Ratio, units cancel	0,55 - 0,70
Total Sulphur	mg/m ³ _n	0 – 15.0
Methane	vol%	88.0 – 98.0
Carbon Dioxide	vol%	0 – 2.0
Nitrogen	vol%	0 – 3.0
Total inerts	vol%	0 – 5.0
Hydrogen Sulphide	mg ³ _n	0 – 4.0
Odourising Agent	mg/m ³ _n	0 – 20.0

Annexure C: List of applicable Regulations, Standards and Codes

1. The Licensee must comply with all relevant codes and standards including but not limited to the following:
 - (a) ASME B31.8-2010 – Gas Transmission and Distribution Piping Systems
 - (b) ASME B31.8S – Managing System Integrity of gas pipelines
 - (c) ASME VIII – Rules for construction of Pressure Vessels
 - (d) ASME 16.5 – Pipe flanges and flanged fittings
 - (e) SANS 208 – The design and installation of compressed natural gas (CNG) vehicle filling stations
 - (f) NFPA 52 – National Fire Protection Association
 - (g) NFPA 54 – National Fuel Gas Code
 - (h) SANS 10019 – Transportable metal containers for CNG basic design, manufacture, use and maintenance;
 - (i) SANS 10228 – Identification and classification of dangerous goods of transport;
 - (j) SANS 10231 – Transport of dangerous goods: Operational requirements for road vehicles;
 - (k) SANS 10323 –2 – Transport of dangerous: Emergency information Systems;
 - (l) SANS 10232 – 3 – Emergency Response guides;
 - (m) SANS 10087:6 2006 – The application of liquefied petroleum and compressed natural gasses at engine fuels for internal combustion engines;
 - (n) SANS 20110:2003 – Uniform provisions concerning the approval of: 1) Specific components for motor vehicles using CNG in the propulsion

system; 2) Vehicles with regard to the installation of specific components of an approved type for the use of CNG in their propulsion;

- (o) SANS 208:2005 – The design and installation of CNG filling stations;
 - (p) SANS 29001: 2006 – Sector specific quality management system for, petroleum, petrochemical and natural gas industries – requirements for product and service supply organisations;
 - (q) SANS 13631: 2003 – Packed reciprocating gas compressors;
 - (r) SANS 347 – Pressure vessels and pressurized systems;
 - (s) SANS 10227–Inspection in terms of the Pressure Equipment Regulations; and
 - (t) AGA-7 – Turbine meter operation and maintenance.
2. The Licensee must also comply with all other relevant legislation, including but not limited to the following:
- (a) The Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);
 - (b) The National Environmental Management Act, 1998 (Act No. 107 of 1998);
 - (c) The Environment Conservation Act, 1989 (Act No.73 of 1989);
 - (d) The National Water Act, 1998 (Act No. 36 of 1998);
 - (e) The Water Services Act, 1997 (Act No. 108 of 1997);
 - (f) The National Environmental Management Air Quality Management Act, 2004 (Act No. 39 of 2004);
 - (g) The Hazardous Substances Act, 1973 (Act No. 15 of 1973);
 - (h) The Health Act, 1977 (Act No. 63 of 1977);
 - (i) National Health Act, 2003 (Act No. 61 of 2003);

- (j) The National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977); and
- (k) Construction Regulations, 2003.