

## Sembcorp Gas Gas Retailer Handbook

## INTRODUCTION

This handbook has been prepared by Sembcorp Gas Pte Ltd to serve as a guide for customers, customer-contracted Professional Engineers, contractors and other relevant personnel involved in the application of natural gas supply and gas connection in Singapore. The procedures and requirements stated in this handbook comply with the latest relevant codes of practice and legal requirements in the Singapore Gas Market. These requirements include:

- Gas Act (Cap 116A);
- Gas (Supply) Regulations;
- Gas Supply Code;
- Gas Metering Code;
- Gas Retailer Code of Conduct;
- Code of Practice for Manufactured Gas Pipe Installation, Singapore Standard, SS 608 : 2015;
- Gas Retailer Handbook on Procedures and Requirements for Gas Supply;
- Other relevant acts, regulations and codes of practice.

To view and download a copy of this handbook and the relevant forms, please visit Sembcorp's website at <a href="http://www.sembcorp.com/en/business-utilities-energy.aspx">http://www.sembcorp.com/en/business-utilities-energy.aspx</a>

## CONTACT NUMBERS

In the event of an emergency or if there are any queries, please call the following numbers provided below.

In case of any gas leak or other emergencies	PowerGas CCR	1800 752 1800 (24 hours)
In case of natural gas flow issues	Sembcorp Gas CCR	6796 9922 (24 hours)
For gas connection, handbook and billing issues	Sembcorp Gas Customer Service	6727 8833 (9am to 5pm, Monday to Friday, excluding public holidays)

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- Form GTP110: 'Certificate of Proof Test (GSIV to Meter)'

## **APPENDIX C: Designated Representative Connection Forms**

Form DR01:	'Application for Gas Supply / Disconnection / Discontinuation'
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Form DR03:	'Designated Representative Declaration Form'
Form DR04:	'Notification of Final Pressure Test'
Form DR05:	'Certificate of Final Pressure Test'
Form DR06:	'Request for Turn-on / Re-commissioning of gas supply'
Form DR07:	'Certificate of Proof Test'
Form DR08:	'Acknowledgement of Turn-on / Re-commissioning of Gas Supply'
Form DR09:	'Certificate of Conformity for Gas Appliance'
Form DR10:	'Statement of Safe for Use'

## **APPENDIX C: SembGas Connection Forms**

Form SG01:	'Approval for Gas Supply / A&A Works'
Form SG02:	'Verification of Meter Reading'
Form SG03:	'Statement of Turn-On of Gas'

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- Form GDP101: 'Application for Gas Distribution Connection'
- Form GDP102: 'Customer Project Data Sheet (For information only)'
- Form GDP105: 'Application for Admittance of Gas'
- Form GDP106: 'Certification of Completion'
- Form GDP107: 'Certificate of Final Pressure Test'
- Form GDP108: 'Certificate of Proof Test'
- Form GDP111: 'Authorisation to Turn On Gas Meter Control Valve'

## **APPENDIX D: Designated Representative Connection Forms**

Form DR01:	'Application for Gas Supply / Disconnection / Discontinuation'
Form DR02:	'Submission of Plan & Specification'
Form DR03:	'Designated Representative Declaration Form'
Form DR04:	'Notification of Final Pressure Test'
Form DR05:	'Certificate of Final Pressure Test'
Form DR06:	'Request for Turn-on / Re-commissioning of gas supply'
Form DR07:	'Certificate of Proof Test'
Form DR08:	'Acknowledgement of Turn-on / Re-commissioning of Gas Supply'
Form DR09:	'Certificate of Conformity for Gas Appliance'
Form DR10:	'Statement of Safe for Use'

## **APPENDIX D: SembGas Connection Forms**

- Form SG01: 'Approval for Gas Supply / A&A Works'
- Form SG02: 'Verification of Meter Reading'
- Form SG03: 'Statement of Turn-On of Gas'



## **DEFINITION LIST**

The following terms shall have the following meanings when used in this handbook:

Check Meter shall mean any subsidiary device used to verify the readings taken by a Meter;

**Designated Representative** shall mean a Professional Engineer appointed by the developer or a responsible person for the premises;

EMA shall mean Energy Market Authority;

*Gas Appliance* shall mean any appliance in which gas is consumed, either for domestic requirements (including cooking, heating or cooling purposes) or for industrial or commercial requirements (including powering a gas engine or as feedstock in a chemical process);

*Gas Fitting* shall mean any pipe, valve, Meter, regulator or other device for the control, measurement and use of gas;

*Gas Installation* shall mean a discrete grouping of Gas Fittings linking a Gas Service Pipe to a Gas Appliance;

*Gas Main* shall mean any gas pipe used for the distribution of gas from a Gas Transmission Pipeline to a consumer but does not include a Gas Service Pipe or an Internal Pipe;

*Gas Service Isolation Valve* shall mean a valve, located at or near the boundary line of any property or the apron of any building, used by a Gas Transporter to isolate the supply of gas to that property or building;

*Gas Service Pipe* shall mean a pipe or any part thereof, other than a Gas Main, used for the purpose of conveying gas from a Gas Main to a Gas Service Isolation Valve, and includes any pipe owned by, or under the management or control of, a Gas Transporter which is used for the purpose of conveying gas from the Gas Service Isolation Valve to the Meter at a consumer's premises;

*Gas Service Work* shall mean any work carried out on any Gas Installation or Gas Appliance, in whole or in part, including any design, construction, installation, commissioning, erection, testing, repair, addition, alteration or maintenance work;



*Gas Transmission Pipeline* shall mean a bulk transmission pipeline or interconnected transmission pipeline, together with equipment (including pressure regulating and control valves) used for the conveyance of gas to a direct access customer or a Gas Mains network, and "Gas Transmission Network" shall be construed accordingly;

Gas Transporter shall mean PowerGas Ltd;

*Internal Pipe* shall mean any pipe, not being a gas pipeline, used for the purpose of conveying gas from a Gas Service Pipe to a Gas Appliance, including a Gas Fitting inserted therein but excluding a Meter;

*Meter* shall mean any device for computing the volume of gas supplied or amount of energy supplied, for charging purposes, but does not include a Check Meter;

*Meter Installation* shall mean any meter and its associated equipment and installation, including any associated pipework, filter, valve, pressure regulating equipment, seal, housing, mounting, telemetry equipment and gas chromatograph;

**Professional Engineer** shall mean a person who is registered as a professional engineer in the mechanical engineering discipline under the Professional Engineers Act (Cap. 253);

SembGas shall mean Sembcorp Gas Pte Ltd.



## 1 Background

Sembcorp Industries (Sembcorp) is a leading provider of sustainable solutions, driven by its purpose to do good and play its part in building a sustainable future.

Headquartered in Singapore, Sembcorp leverages its sector expertise and global track record to deliver innovative solutions that support the energy transition and sustainable development.

Focused on growing its renewables and sustainable urban solutions businesses, Sembcorp aims to transform its portfolio from brown to green. With a balanced energy portfolio of over 12,700MW, Sembcorp has achieved continued growth in renewables with more than 3,200MW of renewable energy capacity in operation and under development globally. The company also has a proven track record of transforming raw land into sustainable urban developments, with a project portfolio spanning over 11,000 hectares across Asia.

Listed on the main board of the Singapore Exchange, Sembcorp is a component stock of the Straits Times Index and sustainability indices including the FTSE4Good Index and the iEdge SG ESG indices.

The company's energy business spans Singapore, Myanmar, Vietnam, China, India, Bangladesh, the UAE, Oman and the UK, and it encompasses power generation, electricity retail, process steam production and distribution, and natural gas supply and retail.

In Singapore, Sembcorp is responsible for the nation's first privately-developed independent power plant – the country's largest cogeneration facility at 815 megawatts when it was completed in 2001. Today, Sembcorp has two gas-fired cogeneration facilities that are capable of producing 1,219 megawatts of power and 900 tonnes per hour steam on Jurong Island. Sembcorp also retails electricity to contestable customers in Singapore. In addition, it provides natural gas supply and gas retail services through its fully-owned subsidiary, Sembcorp Gas Pte Ltd (SembGas), which is Singapore's first commercial importer and retailer of natural gas.

Besides energy solutions, Sembcorp also offers sustainable solutions in water and waste in Singapore. It provides water and wastewater treatment services to customers with a gross water capacity of 8.3 million cubic metres per day. SembWaste, the company's environmental services

arm, offers solid waste management, recycling and public cleaning services, serving over 700,000 households and more than 5,000 industrial and commercial customers.

For more information, please visit www.sembcorpenergy.com.sg

## 2 Gas Supply System

SembGas imports natural gas from West Natuna in Indonesia and supplies this to its customers through high (transmission) and medium (distribution) pressure networks own and operate by PowerGas Ltd. The minimum supply pressure of the high pressure network is approximately 22.76 barg, while that of the medium pressure network is up to 2.5 barg for premises.

Any customer requiring pressure higher than the network operating pressure will have to install the necessary equipment to achieve the required pressure at its own cost. A list of Singapore's natural gas specifications can be found on EMA's website at <u>https://www.spgroup.com.sg under Gas Network Code / Section I</u>.

Customers enquiring about connection and supply of gas, replacement, addition and alteration of gas installations may refer to this handbook as a general guide. This handbook should be read in conjunction with the Gas Act, Gas (Supply) Regulations, Gas Supply Code and all other relevant regulations, codes and standards. For further enquiries, please contact our customer service offices at (65) 6727 8833 or support@sembcorp.com during office hours, from 9.00am to 5.00pm on Monday to Friday (excluding public holidays).

## 3 Professional Engineer (PE)

All Gas Service Work shall be carried out by a Professional Engineer (PE) with a valid practicing certificate in the mechanical engineering discipline under the professionalEngineers Act [Cap 253]

The PE shall be responsible for designing and constructing the Gas Installation from the Gas Service Isolation Valve (GSIV) or the outlet valve of the Meter Installation to the equipment in full compliance with the Gas Act, relevant regulations and codes.

Submission of plans for Gas Installation pipework and addition and alteration work shall be carried out by a PE. The PE must endorse his plans to confirm / certify that the submission complies with the Gas Act, and relevant regulations, codes and standards. These plans will then be used for application for Gas Admittance and gas turn-on.



## 4 Code of Practice and Regulatory Requirements

The design of the Gas Installation or part and the Gas Service Work being carried out on the Gas Installation, must comply with the requirements of the latest revision of the following: -

- 4.1 Gas Act (Cap 116A);
- 4.2 Gas (Supply) Regulations;
- 4.3 Gas Supply Code;
- 4.4 Gas Metering Code;
- 4.5 Natural Gas Connection Policy and Procedures policy;
- 4.6 Code of Practice for Manufactured Gas Pipe Installation, Singapore Standard, SS 608 : 2015;
- 4.7 Handbook on Procedures and Requirements for Gas Supply;
- 4.8 Other relevant acts, regulations and codes of practice

PE applying on behalf of the customer for the supply of gas must ensure that regulatory requirements and procedures are followed.

## 5 Tariffs

There are three categories of transportation tariffs as determined by the Transporter and as reviewed by EMA from time to time. These tariffs are:

- Transmission charges for Transmission Network : Applicable to customers who require high pressure gas supply; transmission tariffs consist of both usage and capacity charges.
- (2) Distribution network transportation tariffs: Applicable to all other customers; distribution tariffs consist of both transmission charge and distribution charge components.
- (3) SLNG Charges (Where applicable):

Further details on the tariffs may be obtained from Sembcorp via email at support@sembcorp.com.

## B PROCEDURES FOR GAS SUPPLY AND CONNECTION

A flowchart on the application procedures for transmission customers is attached in **Appendix A** and the flowchart for distribution customers is attached in **Appendix B**. The relevant forms as mentioned in the procedures below are attached in **Appendix C** for transmission customers and in **Appendix D** for distribution customers.

#### 1 Preliminary Assessment

#### 1.1 Customer Service / Pre-submission Consultation

All enquires for gas supply can be made to our customer service offices at (65) 6727 8833 or support@sembcorp.com during office hours, from 9.00am to 5.00pm from Monday to Friday (excluding public holidays). A sales and marketing personnel will be assigned to follow up with the customer to obtain the customer's requirements. If the customer's premises are within the gas network connection zone, the customer will then be required to appoint a Professional Engineer (PE) as the Designated Representative (DR) who will liaise directly with SembGas's Project Coordinator (PC) on all matters relating to Gas Installation. The DR shall ensure that the Gas Installation is designed, constructed, tested and commissioned in accordance to the requirements of the Gas Act and all relevant regulations, codes and standards. The DR shall also endorse all drawings, documents, applications and submissions in relation to the Gas Installations.

## 2 For Transmission Customers:

## 2.1 Application for Gas Supply and Connection and Site Survey

The customer must first submit Form GTP102<sup>1</sup>. There will be a feasibility study and site survey conducted with DR, PC and Gas Transporter's representative to discuss the entry point at the customer's premises, pressure requirement of at least 18 barg, location of Meter Installation, the distance of connection pipelines and the project evaluation. The customer is then required to submit Forms DR01<sup>2</sup>, DR02<sup>3</sup> and GTP101<sup>4</sup> with the following information:

- (i) 3 sets of location / site plans showing the proposed site and connection point,
- (ii) Pipe route from property boundary to Meter Installation, and
- (iii) Location of Meter Installation.

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<sup>1</sup> Form GTP102 - 'Customer Project Data Sheet '

<sup>2</sup> Form DR01 – 'Application for Gas Supply'

<sup>3</sup> Form DR02 - 'Submission of Plan and Specification '

<sup>4</sup> Form GTP101 – 'Application for Gas Transmission Connection '

All proposed Gas Installation drawings / plans which are submitted together with Form DR01 and DR02 must be duly endorsed by the DR and submitted to SembGas for approval. This approval does not cover the checking on the compliances and engineering design and the DR has to check, ensure and confirm / certify that the submission and all gas service work are in compliance with the Code of Practice and Regulatory Requirements under Section A 4 above.

After the submission has been processed, the applicant will be informed of the outcome via Form SG01<sup>5</sup>.

SembGas will submit the completed form to the Gas Transporter, on behalf of the customer. The Gas Transporter will reply within 30 calendar days upon receipt of such requests from SembGas to inform SembGas whether there is sufficient pipeline capacity.

## 2.2 Notification to Customers on the Project Cost

If there is sufficient pipeline capacity, the customer will be informed of the approval and the Gas Transporter will provide the applicable connection charge and the estimated project lead time through SembGas. Basically, the Transporter evaluates the connection charge based on the average of 5-year gas demand declared by the customer. SembGas will then furnish this information to the customer for review. Once customer has accepted the project cost and lead time, the End User Agreement and gas connection work will be executed.

## 2.3 Gas Transporter to Proceed for Gas Connection and Admittance

Upon execution of the End User Agreement (EUA) between SembGas and the customer and upon receipt of payment of connection cost from the customer, SembGas will confirm the project with the Gas Transporter who will then commence construction works to extend the gas pipeline up to and including the Gas Service Isolation Valve (GSIV).

The following procedures in this step below are only applicable in the event that the Gas Transporter constructs the gas fitting, from the GSIV up to and including the Meter Installation.

When the site from the GSIV to the Meter Installation is ready to receive gas, the DR is required to notify all relevant parties, including but not limited to, the responsible person, owner / developer, main contractor, sub-contractors, architect, engineer, suppliers and vendors, that gas will be admitted into the Gas Installation. The DR must also ensure that the Gas Installation is

5 Form SG01 – 'Approval for Gas Supply / A&A Works '

not tampered with and hot works in the vicinity of the Gas Installation are carried out with all necessary safety precautions.

DR shall give the notification for the final pressure test via Form DR04<sup>6</sup>. Once Gas fitting & Installation is ready for pressure test, DR shall endorse the final pressure test via Forms DR05<sup>7</sup> and GTP109<sup>8</sup> and duly certified by both DR and PC.

Once the Gas Fitting and the Meter Installation are ready to receive gas, the DR is then required to submit Forms DR03<sup>9</sup>, GTP108<sup>10</sup> and Form GTP105<sup>11</sup> to request from the Gas Transporter admittance of gas up to outlet valve of Meter Installation.

The DR will then conduct the necessary Proof Test and submit Forms DR07<sup>12</sup> and GTP110<sup>13</sup> to the Gas Transporter after completion of the test.

The DR must also ensure that all plugs, caps and other ends of the installation are affixed with warning labels marked 'Live Gas. Do Not Tamper'. After the Proof Test on the Gas Installation, no one is allowed to carry out any further work without prior written approval from SembGas. Any further work on the installation will render the Proof Test null and void. If any further work has to be carried out, a new application for the work shall be made together with the plans.

Upon completion of the Proof Test, if the gas supply is not turned on and the consumer's Internal Pipe including the Meter Installation is left unattended, DR must ensure that the gas Meter is removed or a spool is placed at the gas pipe which is connected to the relevant Meter Installation to prevent any flow of gas into the Gas Installation. The tests must be conducted again before turning on the gas supply.

<sup>6</sup> Form DR04 - 'Notification of Final Pressure Test '

<sup>7</sup> Form DR05 - 'Certificate of Final Pressure Test '

<sup>8</sup> Form GTP109 – 'Certification of Final Pressure Test (GSIV to Meter) '

<sup>9</sup> Form DR03 – 'Declaration Form'

<sup>10</sup> GTP GTP108 - 'Certificate of Completion (GSIV to Meter) '

<sup>11</sup> Form GTP105 – 'Application for Admittance of Gas '

<sup>12</sup> Form DR07 - 'Certificate of Proof Test '

<sup>13</sup> Form GTP110 – 'Certificate of Proof Test (GSIV to Meter) '

The DR is required to notify all relevant parties, including but not limited to, the responsible person, owner / developer, main contractor, sub-contractors, architect, engineer, suppliers and vendors, that gas will be admitted into the Gas Installation and ensure that the Gas Installation is not tampered with and hot works in the vicinity of the Gas Installation are carried out with all necessary safety precautions.

The Gas Transporter will then connect the Gas Fitting to the transmission pipeline and preliminarily admit gas into the Gas Fitting up to and excluding the Meter Installation. Upon successful admittance of gas up to and excluding the Meter Installation, the Gas Transporter will issue Form GTP105<sup>11</sup> and DR to proceed to purge and commission up to, and excluding, the Meter Installation.

#### 2.4 Gas Transporter to Proceed for Gas Connection and Interim Admittance

The procedures in this step 2.4 are <u>only applicable</u> in the event that SembGas / the customer constructs the Gas Fitting from, but excluding, the GSIV up to and including the Meter Installation, instead of the Gas Transporter. Before sending an application to the Gas Transporter to request for connection and admittance of gas, the DR is required to conduct the Final Pressure Test via Form DR04.

Once installation has passed the Final Pressure Test, both DR and PC shall certify on the Forms DR05 and GTP109.

Once the Gas Fitting and the Meter Installation are ready to receive gas, the DR is then required to submit Form GTP108<sup>10</sup> and Form GTP105<sup>11</sup> to request from the Gas Transporter admittance of gas up to, and including, the Meter Installation.

The DR will then conduct the necessary Proof Test and submit Forms DR07 and GTP110 to the Gas Transporter after completion of the test.

The DR must also ensure that all plugs, caps and other ends of the installation are affixed with warning labels marked 'Live Gas. Do Not Tamper'. After the Proof Test on the Gas Installation,

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no one is allowed to carry out any further work without prior written approval from SembGas. Any further work on the installation will render the Proof Test null and void. If any further work has to be carried out, a new application for the work shall be made together with the plans.

Upon completion of the Proof Test, if the gas supply is not turned on and the consumer's Internal Pipe including the Meter Installation is left unattended, DR must ensure that the gas Meter is removed or a spool is placed at the gas pipe which is connected to the relevant Meter Installation to prevent any flow of gas into the Gas Installation. The tests must be conducted again before turning on the gas supply.

The DR is required to notify all relevant parties, including but not limited to, the responsible person, owner / developer, main contractor, sub-contractors, architect, engineer, suppliers and vendors, that gas will be admitted into the Gas Installation and ensure that the Gas Installation is not tampered with and hot works in the vicinity of the Gas Installation are carried out with all necessary safety precautions.

The Gas Transporter will then connect the Gas Fitting to the transmission pipeline and preliminarily admit gas into the Gas Fitting up to and including the Meter Installation. Upon successful interim admittance of gas, the DR shall then proceed to purge and commission the Gas Fitting up to and including the Meter Installation.

## 2.5 Customer to Proceed with Consumer's Internal Pipe

Concurrently, DR is required to liaise with the PC closely to oversee and carry out with Consumer's Internal Pipe from outlet valve of Meter Installation to the Gas Appliance at the customer's premises. The DR shall ensure that the Gas Installation is constructed in accordance with the plan approved for construction and in full compliance with the statutory and relevant codes / standards requirements. Prior written consent must be sought from SembGas for plans which deviate from the original plan approved for construction. Such requests will be sent to the Gas Transporter for approval.

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## 2.6 Application for Gas Turn-On

When the construction of the pipes from outlet valve of Meter Installation to the Gas Appliance is completed, the DR is required to conduct Final Pressure Test. Once installation has passed the Final Pressure Test, both DR and PC shall certify on Form GTP109.

Once the customer's Internal Pipes from the Meter Installation up to the Gas Appliances are ready to receive gas, the DR is required to submit Form GTP108 and Forms DR06 & GTP107<sup>14</sup> to apply for gas turn-on.

The DR will then conduct the necessary Proof Test and submit Forms DR07 and GTP110 to the Gas Transporter after completion of the test.

The DR must also ensure that all plugs, caps and other ends of the installation are affixed with warning labels marked 'Live Gas. Do Not Tamper'. After the Proof Test on the Gas Installation, no one is allowed to carry out any further work without prior written approval from SembGas. Any further work on the installation will render the Proof Test null and void. If any further work has to be carried out, a new application for the work shall be made together with the plans.

Upon completion of the Proof Test, if the gas supply is not turned on and the consumer's Internal Pipe including the Meter Installation is left unattended, DR must ensure that the gas Meter is removed or a spool is placed at the gas pipe which is connected to the relevant Meter Installation to prevent any flow of gas into the Gas Installation. The tests must be conducted again before turning on the gas supply.

The DR is required to notify all relevant parties, including but not limited to, the responsible person, owner / developer, main contractor, sub-contractors, architect, engineer, suppliers and vendors, that gas will be admitted into the Gas Installation and ensure that the Gas Installation is not tampered with and hot works in the vicinity of the Gas Installation are carried out with all necessary safety precautions.

<sup>14</sup> Forms DR06 & GTP107 – 'Application and Request for Gas Turn-On '

SembGas is to register the Meter reading in Form SG02<sup>15</sup>. DR shall then proceed to purge and commission the customer's Internal Pipe up to the Gas Appliance.

DR shall certify that Gas appliance is safe to use by submitting Forms DR09<sup>16</sup> and DR10<sup>17</sup> on the successful purging and commissioning of the consumers internal pipeline until the Gas appliances. Upon receipt of the endorsed Forms DR09 and DR10 by DR, SembGas will issue to Customer the Statement of Turn-On Gas Supply via Form SG03<sup>18</sup>. The customer shall return an acknowledgement of Turn-on Gas Supply via Form DR 08<sup>19</sup>.

## 3 For Distribution Customers:

#### 3.1 Application for Gas Supply and Connection and Site Survey

The customer must first submit GDP102<sup>20</sup>. There will be a feasibility study and site survey conducted with DR, PC and Gas Transporter's representative to discuss the entry point at the customer's premises, the location of the Medium Pressure Reduction Skid (MPRS), the distance of connection pipelines and the project evaluation. The customer is then required to submit Forms DR01 and GDP101<sup>21</sup> with the following information:

- (i) 3 sets of location / site plans showing the proposed site and connection point,
- (ii) Pipe route from property boundary to MPRS, and
- (iii) Location of MPRS.

All proposed Gas Installation drawings / plans which are submitted together with Forms DR01 and GDP101 must be duly endorsed by the DR and submitted to SembGas for approval. This

- 17 Form DR10 'Statement of Safe for Use '
- 18 Form SG03 'Statement of Turn-On of Gas '
- 19 Form DR08 'Acknowledgement of Turn-On Gas Supply '
- 20 Form GDP102 'Customer Project Data Sheet '
- 21 Form GDP101 'Application for Gas Distribution Connection '

<sup>15</sup> Form SG02 - 'Verification of Meter Reading '

<sup>16</sup> Form DR09 - 'Certificate of Conformity for Gas Appliance '

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approval does not cover the checking on the compliances and engineering design and the DR has to check, ensure and confirm / certify that the submission and all gas service work are in compliance with the Code of Practice and Regulatory Requirements under Section A above.

After the submission has been processed, the applicant will be informed of the outcome via Form SG01. SembGas will submit the completed form to the Gas Transporter, on behalf of the customer.

## 3.2 Notification to Customers on the Project Cost

Once the Gas Transporter has responded to SembGas with details on the project cost, SembGas will notify the customer on the applicable connection charge and the estimated project lead time provided by the Gas Transporter. Once the customer has accepted the project cost and lead time, the Offtake Agreement and gas connection work will be executed. For connection to medium pressure natural gas distribution network, typically a lead time of 18 to 20 weeks is required to fabricate, deliver, install and commission the MPRS (Metering and Pressure Reduction Skid).

## 3.3 Gas Transporter to Proceed for Gas Connection and Admittance

Upon execution of the Offtake Agreement (OTA) between SembGas and the customer, and upon receipt of payment for connection cost from the customer, SembGas will confirm the project with the Gas Transporter who will then commence construction of the Gas Installation from the GSIV up to and including the MPRS, once relevant documentations are in place.

When the site from the GSIV to the MPRS is ready to receive gas, the DR is required to notify all relevant parties, including but not limited to, the responsible person, owner / developer, main contractor, sub-contractors, architect, engineer, suppliers and vendors, that gas will be admitted into the Gas Installation, and ensure that the Gas Installation is not tampered with and hot works in the vicinity of the Gas Installation are carried out with all necessary safety precautions.

The DR will then submit Forms DR06 and GDP105<sup>22</sup>, requesting from the Gas Transporter admittance of gas up to outlet valve of MPRS.

## 3.4 Customer to Proceed with Consumer's Internal Pipe

Concurrently, DR is required to liaise with the PC closely to oversee and carry out construction and connection of Gas Installation from outlet valve of MPRS to the Gas Appliance at the

<sup>22</sup>Form GDP105 - 'Application for Admittance of Gas'

customer's premises. The DR shall ensure that the Gas Installation is constructed in accordance with the plan approved for construction and in full compliance with the statutory and the relevant Codes / Standards requirements. Prior written consent must be sought from SembGas who will then respond to the Gas Transporter regarding plans which deviate from the original plan approved for construction.

## 3.5 Application and Approval of Turn-On of Gas

When the construction of the pipes from outlet valve of MPRS to the Gas Appliance is completed, the DR has to submit Forms DR03 and GDP106<sup>23</sup> and will also be required to conduct the Final Pressure Test via Form DR04. Once the installation has passed the test, the DR shall certify on Forms DR05 and GDP107<sup>24</sup>.

The DR will then conduct the necessary Proof Test and submit Forms DR07 & GDP108<sup>25</sup> to SembGas after completion of the test.

The DR must also ensure that all plugs, caps and other ends of the installation are affixed with warning labels marked 'Live Gas. Do Not Tamper'. After the Proof Test on the Gas Installation, no one is allowed to carry out any further work without prior written approval from SembGas. Any further work on the installation will render the Proof Test null and void. If any further work has to be carried out, a new application for the work shall be made together with the plans.

Upon completion of the Proof Test, if the gas supply is not turned on and the consumer's Internal Pipe including the Meter Installation is left unattended, DR must ensure that the gas Meter is removed or a spool is placed at the gas pipe which is connected to the relevant Meter Installation to prevent any flow of gas into the Gas Installation. The tests must be conducted again before turning on the gas supply. DR is required to request for interim admittance of gas immediately prior to the Transporter connects the Gas Installation to the distribution pipeline and admits gas into the Gas Installation up to, but excluding the Meter Installation.

<sup>23</sup> Form GDP106 - 'Certification of Completion '

<sup>24</sup> Form GDP107 - 'Certificate of Final Pressure Test '

<sup>25</sup> Forms DR07 & GDP108 – 'Certificate of Proof Test '

Upon successful admittance of gas, thereafter, DR shall proceed to purge and commission the Gas installation up to the Meter Installation. Thereafter, the Transporter shall purge and commission the Meter Installation.

The DR is then required to submit Forms DR06 and GDP111<sup>26</sup> to apply for gas turn-on. Before the Gas Transporter proceeds to turn on the gas Meter control valve, SembGas is to register the Meter reading in Form SG02. DR shall then proceed to purge and commission the customer's Internal Pipe up to the Gas Appliance.

DR shall certify that Gas appliance is safe to use by submitting Forms DR09 and DR10 on the successful purging and commissioning of the consumers internal pipeline until the Gas appliances. Upon receipt of the endorsed Forms DR09 and DR10 by DR, SembGas will issue to customer the Statement of Turn-On Gas Supply via Form SG03. The customer shall return an acknowledgement of Turn-on Gas Supply via Form DR 08.

# C PROCEDURES FOR ADDITION AND ALTERATION OF GAS FITTINGS AND APPLIANCES

The above procedures from Section (B) 2 or 3 are also applicable for the addition and alteration (A&A) of Gas Fittings and Gas Appliances. Application for works to be carried out on the underground gas mains, such as the application for the termination of the gas supply to premises and the diversion of underground gas pipes, shall be made to SembGas who will then inform the Gas Transporter.

The customer has to submit an official letter of notification and Forms DR01 and DR02 to SembGas informing the intention of A&A works. Upon approval from SembGas, the customer is required to submit to SembGas with the following information:

- (i) Existing pipeline layout plan,
- Mark up of the existing pipeline layout plan indicating any replacement, or addition or alteration of Gas fitting and Gas Appliances, and
- (iii) Either Form GTP102 or GDP102.

Thereafter, SembGas will proceed to conduct a site visit to this new location.

<sup>26</sup> Form GDP111 - 'Authorisation to Turn On Gas Meter Control Valve '

The customer will appoint a DR to carry out this A&A works and the above procedures from Section (B) 2 or 3 apply. Application for gas turn-on will have to be submitted to SembGas with at least 2 weeks' notice provided.

After the submission has been processed, the applicant will be informed of the outcome via Form SG01.

DR has to carry out this A&A works. Once the A&A works is completed, DR has to submit Forms DR03, DR04, DR05 and GDP106, GDP107, GDP108 if necessary to SembGas. Concurrently, DR needs to submit the Form DR06 indicating the specific date of Turn-On (Given at least 2 weeks' notice) to SembGas.

Before Gas Turn-On process, the DR/PE will do a final pressure test to ensure the pressure stability has reached. Upon successful Gas Turn-On, SembGas shall issue Form SG03. Thereafter, DR/PE shall proceed to purge and commission the Gas installation up to, but excluding the Meter Installation.

## D PROCEDURES FOR SWITCHING OF GAS RETAILERS (FOR EXISTING NATURAL GAS USERS)

For existing natural gas users whom intend to procure gas supply from SembGas, please contact our customer service offices at (65) 6727 8833 or email support@sembcorp.com. Our representative will contact you for further detailed discussion and the customer is required to first submit GDP102. SembGas will work with the Gas Transporter to confirm if the existing infrastructure can be used. If there are requirements for modification of existing MPRS or a new MPRS, above procedures from Section (B) 2 or 3 shall apply.

Upon execution of the Offtake Agreement, SembGas shall submit the gas offtake point registration notice to the Gas Transporter through their Gas Transportation IT System Solution (GTSS) no later than 5 business days prior to the intended customer's gas-in date.

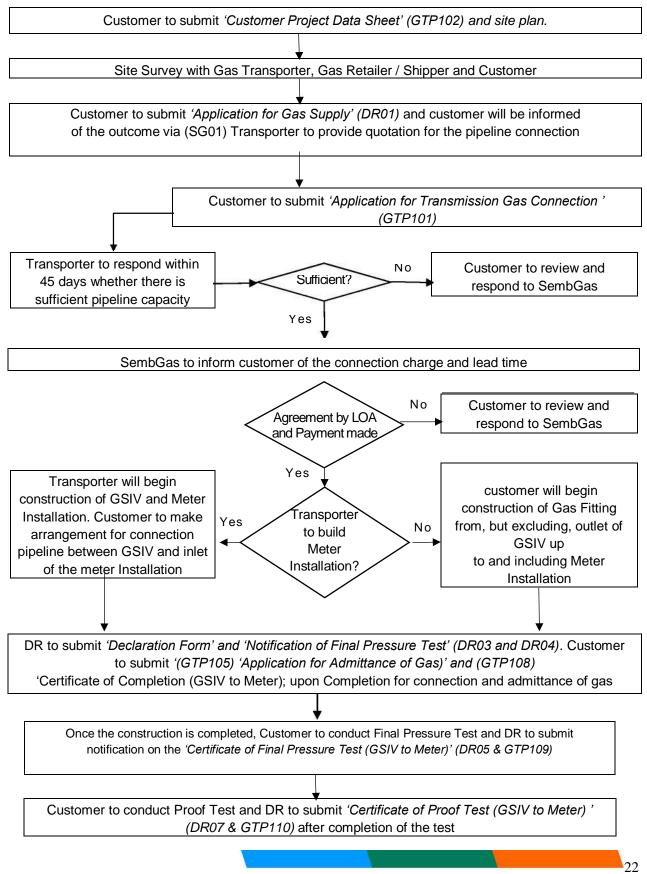
# E PROCEDURES FOR DISCONNECTION AND DISCONTINUATION OF GAS SUPPLY

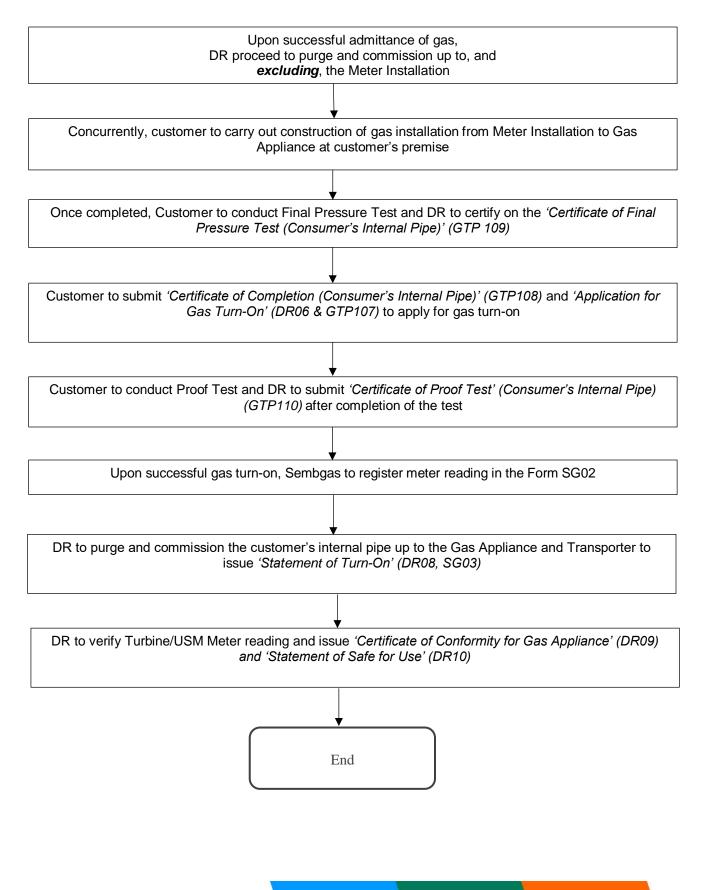
DR is required to inform SembGas via Form DR01 on their intent to discontinue the gas supply to their premise. Upon receipt of Form DR01, SembGas will notify Gas Transporter for the application of disconnection of gas supply and arrangement will be made to shut the gas valve. The customer

shall be obliged to perform all the necessary action(s) for the removal of the gas pipes between the GSIV and the MPRS and all internal gas pipes from MPRS to customer's gas appliances in accordance with the demarcation of responsibilities and all other requirements of the Gas Supply Code.

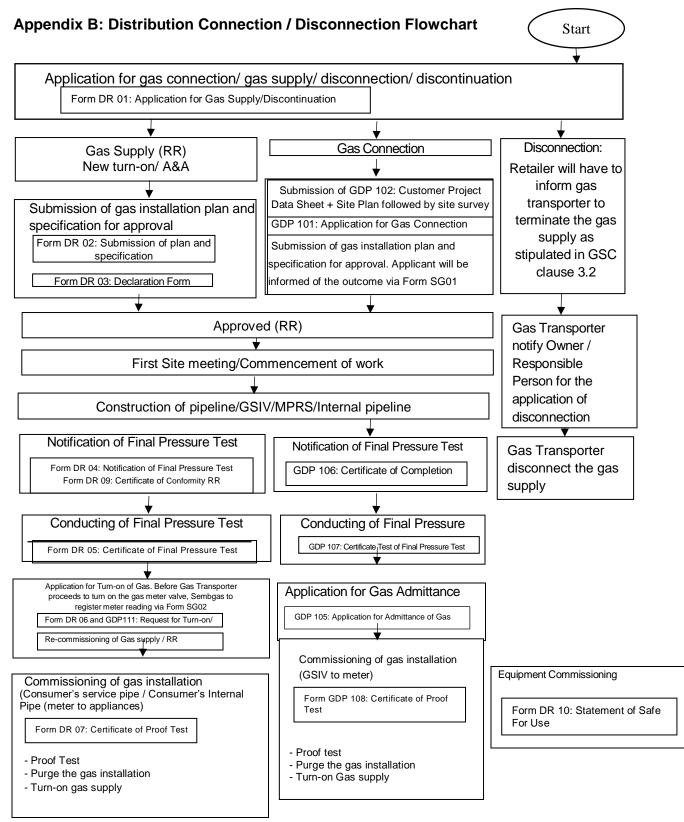


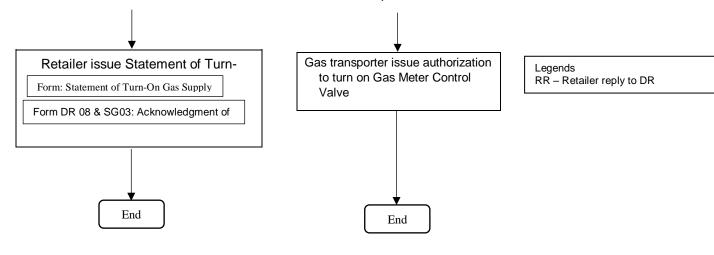
## Appendix A: Transmission Connection Flowchart





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## **Appendix C: Transmission Connection Forms**

Form GTP101:	'Application for Gas Transmission Connection'
Form GTP102:	'Customer Project Data Sheet (For information only)'
Form GTP105:	'Application for Admittance of Gas'
Form GTP107:	'Authorization to open Gas Meter Control Valve
Form GTP108:	'Certification of Completion (GSIV to Meter)'
Form GTP109:	'Certification of Final Pressure Test (GSIV to Meter)'
Form GTP110:	'Certificate of Proof Test (GSIV to Meter)'

## Appendix C: Designated Representative Connection Forms

Form DR01:	'Application for Gas Supply / Discontinuation'
Form DR02:	'Submission of Plan & Specification'
Form DR03:	'Designated Representative Declaration Form'
Form DR04:	'Notification of Final Pressure Test'
Form DR05:	'Certificate of Final Pressure Test'
Form DR06:	'Request for Turn-on of gas supply'
Form DR07:	'Certificate of Proof Test'
Form DR08:	'Acknowledgement of Turn-on Gas Supply'
Form DR09:	'Certificate of Conformity for Gas Appliance'
Form DR10:	'Statement of Safe for Use'

## Appendix C: SembGas Connection Forms

Form SG01:	'Approval for Gas Supply / A&A Works'
Form SG02:	'Verification of Meter Reading'
Form SG03:	'Statement of Turn-On of Gas'

## Appendix D: Distribution Connection Forms

Form GDP101:	'Application for Gas Distribution Connection'
Form GDP102:	'Customer Project Data Sheet (For information only)'
Form GDP105:	'Application for Admittance of Gas'
Form GDP106:	'Certification of Completion'
Form GDP107:	'Certificate of Final Pressure Test'
Form GDP108:	'Certificate of Proof Test'
Form GDP111:	'Authorisation to Turn On Gas Meter Control Valve'

## Appendix D: Designated Representative Connection Forms

Form DR01:	'Application for Gas Supply / Discontinuation'
Form DR02:	'Submission of Plan & Specification'
Form DR03:	'Designated Representative Declaration Form'
Form DR04:	'Notification of Final Pressure Test'
Form DR05:	'Certificate of Final Pressure Test'
Form DR06:	'Request for Turn-on of gas supply'
Form DR07:	'Certificate of Proof Test'
Form DR08:	'Acknowledgement of Turn-on Gas Supply'
Form DR09:	'Certificate of Conformity for Gas Appliance'
Form DR10:	'Statement of Safe for Use'

## Appendix D: SembGas Connection Forms

Form SG01:	'Approval for Gas Supply / A&A Works'
Form SG02:	'Verification of Meter Reading'
Form SG03:	'Statement of Turn-On of Gas'