



CONSULTATION PAPER

PROPOSED MODIFICATIONS TO GAS SUPPLY CODE

Closing date for submissions of comments and feedback:
24 Jan 2017

Note: There will be no extension of deadline beyond 24 Jan 2017, 5pm

27 DEC 2016

ENERGY MARKET AUTHORITY
991G Alexandra Road #01-29
Singapore 119975
www.ema.gov.sg

Disclaimer:

The information in this Consultation Paper is not to be treated by any person as any kind of advice. The Energy Market Authority shall not be liable for any damage or loss suffered as a result of the use of or reliance on the information given in this Consultation Paper.

1 Introduction

- 1.1 The Gas Supply Code (“Code”) sets out the obligation of gas licensees to comply with the standards and procedures for the safe and reliable operation of the gas supply system.
- 1.2 The Code also describes the rights and obligations of the gas licensees in respect of the conveyance of gas and provision of gas supply.

2 Proposed Modifications

- 2.1 Pursuant to Clause 1.6 of the Code, EMA seeks representations on the proposed modifications to the Code as set out in Appendix 1.
- 2.2 The proposed modifications are to:
 - a) update the delivery pressure to low pressure natural gas retail consumers;
 - b) provide clarity on the requirements for notification, investigation, reporting and follow-up action taken or to be taken for gas-related incidents; and
 - c) update the gas specification of town gas.

3 Request for Written Representations

- 3.1 EMA invites written representations on the proposed modifications to the Code as set out in Appendix 1. Please use the form given in Appendix 3 for your submission.

- 3.2 Please send your submission by email to EMA_GIRD@ema.gov.sg

Alternatively, you may also send your submission by post/fax to the following address:

*Gas Industry Regulation Department
Industry Regulation Division
Energy Market Authority
991G Alexandra Road #01-29
Singapore 119975
Fax: (65) 6835 8020*

- 3.3 Anonymous submission will not be considered.
- 3.4 All submissions must reach EMA by 5pm on 24 Jan 2017.
- 3.5 EMA will acknowledge receipt of all submissions electronically. Please contact Mr Khalid Mohd Aleh at 6376 7577 or Mr Chow Siu Hang at 6376 7563 if you do not receive an acknowledgement of your submission within two business days.
- 3.6 EMA reserves the right to make public all or parts of any written submissions made in response to this Consultation Paper and to disclose the identity of the source. Any part of the submission, which is considered by respondents to be confidential, should be clearly marked and placed as an annex. EMA will take this into account regarding disclosure of the information submitted.

~ End ~

Appendix 1

Table 1: Proposed Modifications to the Gas Supply Code

<u>Modification Ref. No.</u>	<u>Clause*</u>	<u>Original Text</u>	<u>Modification</u>	<u>Reasons</u>
GSC/2016/7	2.3(a)(ii)	gas supplied to low pressure natural gas retail consumers shall be maintained at a pressure between 15 mbars and 25 mbars (inclusive of both pressures) measured at the outlet of the gas service isolation valve; and	gas supplied to low pressure natural gas retail consumers shall be maintained at a pressure between 15 <u>17</u> mbars and 25 <u>23</u> mbars (inclusive of both pressures) measured at the outlet of the gas service isolation valve; and	This amendment is to align with standard BS EN 437 and BS EN 30-1-1 required by SPRING Singapore on the Control Goods under the Consumer Protection Scheme for natural gas appliances.
GSC/2016/8	5.1.6	The relevant gas licensee shall carry out investigations into all major incidents related to gas and submit the relevant reports as soon as practicable to the Authority.	The relevant gas licensee <u>(as specified in Standing Operating Procedures issued by the Authority which are applicable to that gas licensee in respect of the investigation and reporting of major incidents related to gas)</u> shall carry out investigations <u>and submit reports relating to</u> into all major incidents related to gas incidents and submit the relevant reports as soon as practicable to the Authority in accordance with the Standing Operating Procedures, and shall comply with all requirements specified in the Standing Operating Procedures in relation to the notification, investigation, reporting and follow-up action taken or to be taken in relation to such incidents.	This amendment is to provide clarity to all relevant gas licensees on the requirements for notification, investigation, reporting and follow-up action taken or to be taken for gas-related incidents.

* With reference to the clause of the Gas Supply Code dated February 2016 as published on EMA's website.

<u>Modification Ref. No.</u>	<u>Clause*</u>	<u>Original Text</u>	<u>Modification</u>	<u>Reasons</u>
GSC/2016/9	7.1(b)	See details in Appendix 2 of this paper below.	See details in Appendix 2 of this paper below.	This amendment is to update the gas specification of town gas.

Updates to Town Gas Specification

Town Gas

1	Gas Type	:	Group 5
2	Specific Gravity	:	0.53 <u>0.50</u> - 0.59
3	Gross Calorific Value	:	18.63 MJ/m ³ , Saturated @ 288.75 K & 101 kPa
4	Wobbe Index	:	23.15 – 25.46 <u>26.35</u> MJ/m ³
5	Weaver Flame Speed	:	40.6 <u>32 – 42</u>
6	Stoichiometric Combustion Air	:	4.2 <u>4.4</u> vol / vol of gas
7	Limits of Flammability	:	3.0 – 55 % of gas in air
8	Carbon Monoxide	:	6.0 % vol
9	Ignition Temperature	:	> 400 °C
10	Theoretical Flame Temperature	:	~ 2000 °C

Typical Town Gas Composition

This list is intended to be a guide where specific and technical information is required. During normal operations, the individual components in the piped-gas are expected to vary between low and high ranges as given below:

Components	Low Range	High Range
Hydrogen	53.0 <u>41.0</u>	65.0
Methane	3.0 <u>4.0</u>	20.0 <u>33.0</u>
Ethane	0.1 <u>0.0</u>	2.0 <u>2.6</u>
<u>Propane</u>	<u>0.0</u>	<u>1.3</u>
<u>Butane</u>	<u>0.0</u>	<u>1.7</u>
<u>Pentane</u>	<u>0.0</u>	<u>5.0</u>
n-Pentane	1.0	2.7
i-Pentane	1.0	3.7
Carbon Monoxide	2.0	6.0
Carbon Dioxide	11.0 <u>9.0</u>	23.0 <u>20.0</u>
Nitrogen	2.0	5.5 <u>10.0</u>
Oxygen	0.5	1.5 <u>2.5</u>

Representations on the Proposed Modifications to the Gas Supply Code

Name: _____

Designation: _____

Company: _____

Email: _____

Role (Gas Transporter/Shipper/Retailer/Consumer/Others): _____

Submission Date: _____ (dd/mm/yy)

Modification Ref. No.	Clause*	Comments

* With reference to the clause of the Gas Supply Code dated February 2016 as published on EMA's website.