



## **DECISION PAPER**

# **PROPOSED MODIFICATIONS TO GAS SUPPLY CODE**

10 APR 2017

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## **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 EMA had proposed modifications to the Code 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 Public Consultation**

- 3.1 Pursuant to Clause 1.6 of the Code, EMA had on 27 Dec 2016 sought written representations on the proposed modifications to the Code. No written representation was received when the consultation closed on 24 Jan 2017.
- 3.2 Appendix 1 sets out the modifications to the Code.

## **4 EMA’s Decision**

- 4.1 EMA has decided to modify the Code as set out in Appendix 1. The proposed Code modifications will come into effect on 20 Apr 2017.

## Appendix 1

### Proposed Modifications to the Gas Supply Code

Modification Ref. No.	Clause*	Original Text	Modified Text
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 <del>15</del> <u>17</u> mbars and <del>25</del> <u>23</u> mbars (inclusive of both pressures) measured at the outlet of the gas service isolation valve; and
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> <del>into</del> all major incidents related to gas <del>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.</del>
GSC/2016/9	7.1(b)	See details in Appendix 2 of this paper below.	See details in Appendix 2 of this paper below.

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\* With reference to the clause of the Gas Supply Code dated January 2017 as published on EMA's website.

## Updates to Town Gas Specification

Town Gas

<del>1</del>	<del>Gas Type</del>	<del>÷</del>	<del>Group 5</del>
2	Specific Gravity	:	<del>0.53</del> <u>0.50</u> - 0.59
3	Gross Calorific Value	:	18.63 MJ/m <sup>3</sup> , Saturated @ 288.75 K & 101 kPa
4	Wobbe Index	:	23.15 – <del>25.46</del> <u>26.35</u> MJ/m <sup>3</sup>
5	Weaver Flame Speed	:	<del>40.6</del> <u>32</u> – <u>42</u>
6	Stoichiometric Combustion Air	:	<del>4.2</del> <u>4.4</u> vol / vol of gas
7	Limits of Flammability	:	3.0 – 55 % of gas in air
<del>8</del>	<del>Carbon Monoxide</del>	<del>÷</del>	<del>6.0 % vol</del>
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	<del>53.0</del> <u>41.0</u>	65.0
Methane	<del>3.0</del> <u>4.0</u>	<del>20.0</del> <u>33.0</u>
Ethane	<del>0.1</del> <u>0.0</u>	<del>2.0</del> <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>
<del>n-Pentane</del>	<del>1.0</del>	<del>2.7</del>
<del>i-Pentane</del>	<del>1.0</del>	<del>3.7</del>
Carbon Monoxide	2.0	6.0
Carbon Dioxide	<del>11.0</del> <u>9.0</u>	<del>23.0</del> <u>20.0</u>
Nitrogen	2.0	<del>5.5</del> <u>10.0</u>
Oxygen	0.5	<del>1.5</del> <u>2.5</u>